

GLOBALIZATION AND EDUCATION: 21ST CENTURY INSTRUCTIONAL
PRACTICES FOR URBAN TEACHERS

by

Howard Menand

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Approved by:

Dr. Greg Wiggan

Dr. Stephen Hancock

Dr. Peggy Ceballos

Dr. Christopher O'Brien

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ABSTRACT

HOWARD MENAND. Globalization and education: 21st century instructional practices for urban teachers. (Under the direction of DR. GREG WIGGAN)

In the current knowledge economy, a connection exists between globalization and global macro policies and the micro level effect of these policies at the local classroom level. This study begins by establishing globalization's impact on education at the local level by operationalizing 21st century instruction as a global educational outcome that is actually a macro policy with micro effects. With this framework in place, this study examines the ability of a higher education institution to prepare pre-service teachers to provide 21st century instruction in the public middle school setting. In order to examine the connection between higher education and the public middle school, the study utilizes qualitative research to examine the level of preparation pre-service teachers receive at the higher institution level. The study also utilizes qualitative research to study participants at the public middle school level in order to measure the degree of 21st century instruction in the classroom resulting from their higher education pre-service preparation. The study finds that a connection exists between the university and the public middle school setting. The professor participants clearly conceptualize globalization and 21st century instruction. Additionally, the teacher participants also conceptualize globalization and 21st century instruction. However, a point of diffusion exists between the active and intended curriculum suggesting that conceptualization is not the same as instructional delivery. Finally, the results support the hypothesis that globalization has an impact on classroom instruction at the local level.

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DEDICATION

This “dissrotation” is dedicated to the real Suzi, the real Ethan, and the Real Iria. I love each and every one of you.

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CHAPTER ONE: INTRODUCTION

I also hear from many business leaders who want to hire in the United States but can't find workers with the right skills. Growing industries in science and technology have twice as many openings as we have workers who can do the job. Think about that – openings at a time when millions of Americans are looking for work. It's inexcusable. And we know how to fix it. (President Barack Obama, 2012, para. 28)

The connection between public education and the state of the economy—both local and global—becomes less tenuous and more intertwined as the world adjusts to the pervasive dynamics of globalization. As Gibson-Graham (1996) explains, globalization is essentially “a set of processes by which the world is rapidly being integrated into production and financial markets, the internationalization of a commodity culture promoted by an increasingly networked global telecommunications system,” (p. 121). The operative words in this definition include processes, internationalization, and networked—all of which point to the interdependence and interconnection that continues to occur as an outcome of globalization. With respect to the field of education, the inherent processes of globalization created a transformation in priorities. Under this paradigm shift, education's focus emphasizes preparing individuals to succeed in a knowledge economy where workers equate to human capital—the receptacles of said knowledge (Nam, 2009).

Recent trends portray the intricacies of this global-economic dynamic. For instance, the Workforce Readiness Report Card reveals not only the critical skills that employers require of employees but also illustrates the influence of private industry on public education (McLester & McIntire, 2006). The most recent Workforce Readiness survey highlights a need for employees to possess the following skills:

- 1) Combination of basic knowledge and applied skills
- 2) Professionalism/work ethic, teamwork/collaboration, and oral communication
- 3) Knowledge of foreign languages
- 4) Creativity/innovation (Casner-Lotto & Barrington, 2006)

Due to the leverage that employers possess in the workforce supply line, they essentially dictate the type of workplace skills workers must possess and the hierarchical value of these skills—a point that illustrates the corporatization of education and which will be further developed throughout this study.

Additionally, higher education data point to the effects of globalization's commoditization of education. For example, during the past decade undergraduate enrollment in the United States increased by 4.4 million students (Aud, S., et al., 2011). Also, enrollment of international students at American colleges and universities now equals 3.5% of American students — for a total of 723,277 students nationally (Institute for International Education, 2011). Simply put, global forces motivate and easily permit foreign students to attend higher education institutions in the U.S. With 75% of international students specializing in Science Technology Engineering and Math (STEM) fields (Institute of International Education, 2011), and U.S. universities and colleges graduating a majority of undergraduates with degrees in business—21% in total (Aud, S.,

et al., 2011), it appears that global-economic forces not only inspire the educational decisions of many students, but also place a premium on specific knowledge sets as essential commodities. Survival in an interdependent world mandates both attendance at higher education institutions and also the pursuit of specific skills and knowledge.

The impetus pressuring education to respond to private industry occurs due to such factors as rapid technological innovations and the rise of a knowledge economy—forces that occur under the umbrella of globalization (Nam, 2009). Furthermore, since students now compete in a global job market, public K-12 schools must provide students with the requisite skills for jobs that do not exist at this point in time, but will become available in the near future. While predicting the exact jobs that will emerge in the future is difficult, it is clear from examining the current employment trends that a myriad of current jobs did not exist ten years ago. Such recently created jobs include social media/online community manager, sustainability manager, and elder-care services coordinator (Ryan, 2011). The point here merely underscores the challenges that schools confront in their efforts to prepare students for entrance into the evolving knowledge economy.

Interestingly, at a macro level, education has responded to these global forces, and evidence of this response manifests itself in the classroom via state and federal education policies and initiatives. In the state in which this research study was conducted, the document known as *Global Vision Tomorrow* (pseudonym), which is the product of the Global Vision Tomorrow Initiative, represents a macro-level education endeavor designed to address the ramifications of globalization (University General Administration (abbreviated), 2007). Essentially, the Higher Education System, the governing agency of

public higher education in the state, endeavored to understand how it could address current and future 21st century needs in the areas of teaching, research and scholarship, and public service. As a result, these Global Vision Tomorrow Initiative macro policies equate to state level directives driven by global forces. One primary tenet of *Global Vision Tomorrow* recommends that “[The higher education system] should educate its students to be personally and professionally successful in the 21st century and, to do so, should enhance the global competitiveness of its institutions and their graduates,” (University General Administration, 2007). As a result, the state’s public universities have been charged with the mandate of providing pre-service teachers with a background in global awareness in order to prepare teachers for the K-12 classroom.

Further education macro-responses to global demands include the enhanced integration of technology in the classroom and modified curriculum expectations (Nam, 2009). For example, the Partnership for 21st Century skills (P21)—an organization advocating not only 21st century skills but also global competitiveness—offers an illustrative example of globalization’s infusion into the realm of public education (*Framework for 21st Century Learning*, 2011). P21 places an emphasis on collaboration, problem solving, technology integration, and global awareness in the classroom, which are skills viewed as essential for students to succeed in the 21st century and clearly align with the previously discussed skills outlined in the Workforce Readiness Survey. At the state level, P21 skills surface in the statewide teacher evaluation instrument; this instrument requires that teachers infuse daily lessons with global awareness and incorporate such skills as collaboration and critical thinking (i.e. 21st century skills) into classroom instruction (*Professional Teaching Standards [abbreviated]*, 2011).

The curriculum response designed by education policy makers at the macro level, as described above, results from a conglomeration of various factors that ultimately contribute to a perceived sense of urgency dictating a need to restructure educational policy. For instance, due to regional and geo-political factors, the labor market expanded beyond localities so that workers now compete with each other on a global scale, not just at the regional or local level (Freeman, 2006). Furthermore, as a result of rapid technological advancements—an integral aspect of globalization—the world is now more interconnected, competitive, and collaborative (Freidman, 2005). Yet, even as the job market has globalized, international academic achievement indicators reveal that American students are not prepared to compete in this global context.

The Program for International Assessment (PISA), which measures reading literacy, mathematics literacy, and science literacy for 15 year olds every 3 years, supports this point. For example, American students when compared to their Organization for Economic Cooperation and Development (OECD) counterparts on the 2009 PISA results rank 8th in reading, 21st in math, and 13th in science (Fleischman, Hopstock, Pelczar, & Shelley, 2010). Additionally, data from the Progress in International Reading Literacy Study (PIRLS) reveal that while the scale score for American students of 540 is significantly above the PIRLS average of 500, it lags behind the top performing nations by approximately 25 scale score points (Baer, Baldi, Ayotte, & Green, 2007). For a nation with a GDP of \$15 trillion, which ranks number 2 in the world behind the European Union (*The World Factbook*, 2009) American public school students are not performing at a level commensurate with the wealth potential of their nation. Ultimately, this sense that American students lack the skills to compete against

international students supports the narrative mandating structural changes to the education system.

As globalization asserts a greater presence in the realm of education, schools must modify their structure, curriculum, and academic focus to prepare students for the demands of the new economy. Of course, questions remain: how much have schools changed? Are schools still dependent on the traditional curriculum? Or have schools begun the process of adapting to the new environment in order to prepare students for jobs that do not exist today? Finally, all of these questions surface within a larger context that calls into question the purpose of education. Is the purpose of education to prepare students for future jobs or to create well-rounded democratic citizens? In the current globalized environment, schools must prepare students to succeed at an international level through an infusion of 21st century skills, while also enlightening students so that they can not only compete, but also collaborate at an international level.

Statement of the Problem

The problem is the underperformance of U.S. students at a time when the global workforce has not only doubled but also become more competitive. To begin, in our current globalized context, the level of interdependence and interconnection among nations and regions of the world has produced a scenario in which students as future employees must compete against other individuals from around the world. Yet, as international academic indicators reveal, American students perform average to below average in comparison to students from other nations. The PISA results, which illustrate that American students rank 8th in reading, 21st in math, and 13th in science (Fleischman, Hopstock, Pelczar, & Shelley, 2010), serve as proof positive of this point. These

indicators point to the presence of significant systemic flaws within the United State's public school system. As American students continue this downward academic trend, in comparison, school systems internationally emphasize the development of human capital through restructured education programs. For example, the nations of Finland, Singapore, and South Korea over recent decades revitalized and redeveloped their national school systems to focus on producing highly educated students (Darling-Hammond, 2010; Sahlberg, 2010).

It must be noted that the underperformance of American students on international indicators merely accentuates an overall structural development within the United States. Even as American students continue to perform poorly in comparison to their international counterparts, national data illustrates the presence of collective failures that must be addressed. Recent National Assessment of Educational Progress (NAEP) data for 4th grade students in mathematics indicate that only 40% of students are at or above proficiency and in 8th grade the number drops to 35% at or above proficiency (National Center for Education Statistics, 2011). The performance of 8th grade students in science reveals a similar tendency with only 32% of students at or above proficiency (National Center for Education Statistics, 2011). Of course, these recent data points underscore a long-term trend—a trend explored in *Rising above the gathering storm* (2007). Among the findings of this study, the authors point to global competition as a driving force to redevelop the educational focus within the United States. Due to the global wage structure, American workers cannot compete against low-wage workers at an international level, thus the United States must leverage its innovation capabilities, which incorporate a focus on research and development and depend on a highly-trained

workforce. However, in *Rising above*, a reference to historic academic trends points to a pattern of inadequate performance of American students in the critical subject of science (Committee on Prospering in the Global Economy of the 21st Century: An Agenda for American Science and Technology, National Academy of Sciences, National Academy of Engineering, Institute of Medicine, 2007). As a result, an adequate solution calls on serious educational reform measures that ensure all students possess the requisite skills to participate in the knowledge economy.

Additionally, while academic indicators reveal that performance of U.S. students ranks lower than international students, these results occur at a time when Americans must compete against individuals from around the world for future employment. Furthermore, changes to the skill requirements dictated by employers of potential employees are rapidly transforming the workplace. Employers now expect workers to arrive with adequate training in both soft skills (i.e. critical thinking, problem solving, and communication) and preparation in hard skills—science, technology, engineering, and math. Of course, this current trend points to the influence of business on an economic structure that preferences global competition within a scarcity model rather than global cooperation within a collaborative world model. As a result, the responsibility for responding to this altered dynamic in order to produce adequately trained works rests with public schools.

These current economic and educational circumstances establish the framework of this study and underscore the nature of this complex problem. In order to fully comprehend this problem, it is necessary to examine the historical circumstances of globalization that established the foundation of this current global scenario. The

following sections (*United States as a Global Power, Global Competition, Cities at the Forefront of Globalization, Macro Policies to Micro Effect*) situate this problem within the larger historical context.

United States as a Global Power

At the end of World War II, the United States government and its industrial sector filled a global political and economic vacuum left behind due to the destruction of nations at war. Various factors and geopolitical conditions contributed to this American surge, including the 1944 Bretton Woods conference, which created not only the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD)—now known as the World Bank, but also fixed the international exchange rate to the U.S. dollar (Weaver, 2011). Out of the Bretton Woods conference materialized an economic framework that established the United States as a dominant worldwide force and decision maker. Through this arrangement, the United States supplied the leadership to key international monetary agencies (i.e. IMF, World Bank, and WTO), which thus allowed the U.S. to benefit from favorable economic decisions at a macro-level (Peet et al., 2003; Stiglitz, 2003). Additionally, the historic and unmatched Marshall Plan, a significant stimulus package designed to rebuild war torn Europe, solidified the political/economic link between the United States and Europe (Weaver, 2011). The outcome of these actions contributed to the foundation of sustained American global hegemony.

However, this point deserves further exploration because the outcome of American global hegemony did not result just from American determination and exceptionalism. In fact, without any genuine international economic competition at the

end of WWII, the United States industrial sector found itself in an economic arena in which it could easily dominate (Weaver, 2011). Consider this point, all current economies in 2012, whether G8 or G20 (i.e. Germany, Japan, China, India, Brazil, etc.) with the exception of the United States, suffered significant war damage that disabled industry and destroyed infrastructure, or, in contrast, the economies were in such a rudimentary condition at that time anyway that they did not even exist in contemporary terms. The economies of Brazil and India illustrate this latter point. While this global-economic context produced the circumstances that enabled nearly fifty years of American global authority—economically and militarily—the underlying point remains that American hegemony was both intentional and accidental. The global circumstances of the post-World War II era thus produced a geo-political framework that enabled the United States to establish itself as an economic global leader. Finally, this point is important not only because it demonstrates the historical origins of globalization’s influence on the United States, but also because it portrays the relationship between the United States and the rest of the world within a globalized context.

Global Competition

Through the progression of the second half of the 20th century, challenges emerged that influenced the direction and nature of globalization’s influence as well as the United States’ influence on the world. By the 1970s, the economy hit a stretch of stagflation—a period of stagnant growth in coordination with inflation (Peet et al., 2003)—that resulted in the emergence of neoliberal policies, which contrasted with the then current Keynesian economic policies (Peet et al., 2003; Stiglitz, 2003). The contrast between Neoliberalism and Keynesian economic policies illustrates the degree of

involvement or lack of involvement on the part of the government with respect to guiding and supporting private industry. Neoliberals advocate policies of privatization and deregulation, including allowing market forces to freely play out without any influence from the government (Apple, 2006). In contrast, Keynesian policies insist on government intervention at times of potential economic extremes in order to moderate the peaks and valleys of a capitalist economy (Souto-Otero, 2011). Understanding the difference between Keynesianism and Neoliberalism is important because during the 1970s, stagflation had essentially muted the government's ability to positively influence the economy, thus creating favorable circumstances for neoliberal policies to become the dominant economic practice (Peet et al, 2003; Stiglitz, 2003; Weaver, 2011). The policies of privatization and deregulation would then become intertwined with globalization, and as the economies of the world became more interdependent, neoliberal policies would become more pervasive. The impact of this philosophical economic shift would then naturally affect the course of globalization and consequently the United States in the realm of business and education.

Historically, the emergence of neoliberal practices coincides with the era of President Reagan and Prime Minister Thatcher—a timeframe marked by governmental effort to deregulate industry and privatize government (Souto-Otero, 2011). Of course, neoliberal policies were not applied just to the private industry; during this time period neoliberalism began to influence education policy as well. For example, in the United States on August 26, 1981, the Secretary of Education under President Reagan created the National Commission on Excellence in Education and directed this commission to study the effectiveness and quality of public education in the United States, and the

resultant report, known as *A Nation at Risk*, detailed the status of public education at the time as well as prescribing solutions for these detailed education problems (National Commission of Excellence in Education, 1983). Interestingly, the findings regarding the status of American public education painted a dismal picture. For example, when judged by international comparisons, Americans were lagging on academic tests, 23 million American adults were functionally illiterate, many 17 year olds lacked higher order thinking skills, and businesses and the military complained that they had to expend additional resources to remediate individuals in reading, writing, spelling, and computation (National Commission of Excellence in Education, 1983).

Ultimately, the findings and goals set forth in *A Nation at Risk* established the foundation for reform measures implemented in the *Improving Americas Schools Act* (IASA) of 1994 which was a reauthorization of the *Elementary and Secondary Education Act* (ESEA) of 1965 and designed to work in conjunction with *Goals 2000: Educate America Act* (Jorgensen & Hoffmann, 2003). The outcome of IASA and *Goals 2000* include the implementation of content standards, assessments aligned to these standards, and accountability systems that would identify low-performing schools (Jorgensen & Hoffmann, 2003). The historical progression of education reform eventually resulted in the *No Child Left Behind Act* (NCLB) of 2001—a piece of legislation that most notably emphasized strict accountability models through assessment of students (Jorgensen & Hoffmann, 2003). More importantly, the reform measures of NCLB were not only the culmination of efforts set forth in *A Nation at Risk*, but also were the product of neoliberal ideals, which, with respect to education, rely upon strict accountability and high stakes testing (Apple, 2006).

Additionally, within this same era, a shift in the perspective of education's purpose took hold; education now equated to an outcome, in this case employment, instead of just serving the purpose of personal fulfillment and betterment (Olssen, & Peters, 2005). In fact, the Commission on Excellence in Education supports this sentiment, stating "In a world of ever-accelerating competition and change in the conditions of the workplace, of ever-greater danger, and of ever-larger opportunities for those prepared to meet them, educational reform should focus on the goal of creating a Learning Society," (National Commission of Excellence in Education, 1983). There exists a neoliberal connection that explains the commoditization of education at this time. Remember, this was a period of weak economic circumstances; education now became the vehicle for employment, which resulted in the devaluing of some college majors and the supremacy of other college majors. However, the consequence of these global circumstances influenced the purpose of education and altered the importance of various academic majors. Essentially, the new paradigm devalued a liberal arts education in favor of specific technical fields, typically math and science related. The evolution of education as a commodity resulted from global influences along with the educational deficiencies of American students as documented in *A Nation at Risk*.

Fast forward to the early 1990's which mark an era of important geo-political shifts resulting in implications for the American workforce and its ability to compete on a global scale and to sustain its hegemonic leadership. Richard Freeman (2005) describes the labor shift of the early 1990s as "The Great Doubling." Essentially in this era, the communist Soviet bloc of nations collapsed; China moved toward capitalism; India implemented market reforms; and within a short time span the labor pool not only

became global but doubled from 1.46 billion workers to 2.93 billion workers (Freeman, 2005). Additionally, as Freidman (2006) explains, technological advances now meant that competition among workers was no longer regional but instead international. Within a very short historical time period, the workforce grew significantly and became globally interconnected. Because of the sheer volume of workers entering the global workforce, Americans now faced competition in all aspects that would result in lower wages for some and a greater demand for innovation from others. In fact, due to the altered geopolitical framework, continued American competitiveness would now require a greater investment in science and technology education (Freeman, 2005) and a focus on critical skills like communication and problem solving (Wagner, 2008).

Cities at the Forefront of Globalization

While the reach of globalization's impact crisscrosses multiple regions, in the 21st century, cities are uniquely positioned at the forefront of globalization—at least specific global cities. Global cities possess particular characteristics that instill in them an almost nation-state status; the characteristics are as follows,

- 1) Command points in the organization of the world economy; 2) key locations and marketplaces for the leading industries of the current period—finance and specialized services for firms; and 3) major sites of production, including the production of innovations, for these industries. (Sassen, 2006, p. 7.)

Furthermore, there exist about 40 global cities that possess this matrix of global requirements (Sassen, 2006). In general, the function of global cities is significant due not only in part because of their financial influence and role within the service economy but also because of their influence as regions of high density populations. As a result, since a

significant number of public school students in the United States attend schools in urban districts many public school students are coincidentally at the forefront of globalization due to their attendance at urban schools in global cities. In this case, urban public schools comprise either city school systems or city-county oriented school systems. Additionally, the number of students in K-12 public schools in the United States totals approximately 49.3 million (Aud et al., 2011), and out of this total student population, roughly 11% attend urban public schools (Aud et al., 2011). Characteristics of urban schools typically consist of dynamic diversity matrixes (i.e. significant percentages of African-American and Latino/Latina students also mixed in with White and Asian students). The end result is that global forces through their impact on cities produce outcomes that directly impact a significant number and diverse group of American public school students.

Even though globalization is not a new phenomenon, global forces have been at work over the centuries as different phases of globalization continue to propel society forward (Coatsworth, 2004), and, it must be noted, cities throughout the world exist at the forefront as incubators of globalization's most profound influence. Global cities not only provide the setting where global policies are enacted but typically serve as the hub in which the institutions that designed the policies reside. The transformation of Chicago via neoliberal policies, which resulted in the renovation of downtown Chicago to support the service industry and the implementation of neoliberal education practices in the school system, clearly illustrates this point (Lipman, 2004). As global forces redefine the landscape of cities, the result is a direct impact on the localities. The negative impacts of these challenges have been well documented by such educational researchers as Jonathan Kozol, Linda Darling-Hammond, Diane Ravitch, and Gary Orfield. Urban students

typically attend highly segregated schools, lack appropriate funding, and achieve at lower rates in comparison to their suburban and rural counterparts (Darling-Hammond, 2010; Kozol, 2005; Ravitch, 2010). Understanding the characteristics of urban school districts within a global context is essential, because cities, which reside at the forefront of global policies, provide the opportunity to create a successful roadmap to adequately prepare our students for success in a changing economy.

With that framework in place, this study is situated within Crown City (pseudonym), a significant, Southeastern United States urban locality. Crown City, while not a top-tier global city on the same scale as Tokyo, New York, or London, includes a broad spectrum of qualities emblematic of global cities. For example, the Metropolitan Statistical Area (MSA) population is 1.8 million people (*Crown City in Detail (pseudonym)*, 2011), and approximately 273 Fortune 500 companies conduct business in the city. Crown City consistently ranks as the 2nd largest banking location in the United States right behind New York City, and Crown City's emphasis on the service economy is consistent with Lipman's description of characteristics typically present in global cities. Additionally, the public school system within Crown City—Crown City Schools (CCS)—consists of a total student population of 134,792 and ranks 23rd in size in the United States. In 2010, 7,681 CCS students graduated from high school and 88% continued their education (*Crown city in detail (pseudonym)*, 2011), and, it is assumed, these students eventually entered or will enter the workforce. Globalization influences the direction of cities, it shapes the decisions made by governments, it has influenced the global workforce, and with that said, globalization directly impacts public education in Crown City. Because public education must prepare students to survive in the 21st

century, it is important to examine the means by which CCS adequately prepare students to meet the demands of the 21st century.

Macro Policies to Micro Effect

A connection exists between globalization, education, and policies designed by organizations at the global or macro level and the implementation of these policies at the local level. For example, the Organization for Economic Cooperation and Development (OECD) not only analyzes international education data, but then designs policies to be implemented by nations in order to address academic trends or disparities (Spring, 2009). The United Nations Millennium Goals, which include eradicating poverty and hunger, achieving universal primary education, promoting gender equality and empowerment of women, reducing child mortality, improving maternal health, combating HIV/AIDS and other diseases, ensuring environmental sustainability, and promoting global partnerships for development (<http://www.un.org/millenniumgoals/>) also illustrate the global to local impact of macro organizations. However, while these policies are designed at the global level, there still exists a need to examine the local effect of globalization on education, particularly since globalization serves as a process by which education policies are designed from the top and implemented at the local level. In this respect, qualitative research provides the research design method necessary to study the impact of globalization at the school house. The global environment currently dictates that students associate education with economic outcomes—a quid pro quo scenario that prohibits pursuing education purely for the love of knowledge. Now, instead, students must pursue education in order to obtain a job. While a nexus exists between the type of education students must receive and the pursuit of higher education majors, it is clear that public

education is adapting to the forces of globalization in order to prepare students for jobs that do not yet exist. With that framework in place, it is critical to study the local impact that globalization has on classroom instruction in order to evaluate the degree and quality of global instruction at the classroom level. While quantitative data may outline the academic outcomes of students, qualitative research allows the researcher to observe firsthand the quality of global instruction occurring in the classroom.

Purpose of the Study

The current macro global circumstances (i.e. economic recession combined with global competition) dictate that students receive a curriculum rich in 21st century learning content. In this case, 21st century learning content equates to instructing students to problem solve, work collaboratively, think critically, and utilize technology with ease (Partnership for 21st Century Skills, 2011; Wagner, 2008). The evidence suggests that American students in public schools are not achieving at the same academic level as their counterparts in other industrialized nations. However, while the achievement test data, as indicated by TIMSS and PIRLS reveals the existence of a global achievement gap, recent evidence points to an effort underway on the part of public school systems to prepare students for a globalized world. For example, as previously discussed, the state board of education commissioned a study known as *Global Vision Tomorrow* in order to assess the future needs of the state and to then align the state education system—K-12 and higher education—to the goals of this study. One outcome of *Global Vision Tomorrow* included promoting global education at the higher education level within colleges of education. Another example of globalization's macro effect on education exists in the redesign of the teacher observation tool used for observing public school teachers. In this particular

case, teacher observation criteria also include 21st century learning skills and global awareness, which teachers must infuse into their instruction and lesson design.

An understanding that public policy created at the state and federal level yet implemented at the classroom level is essential to this study because it points to a need for qualitative studies designed to assess the realities of state policies in practice as a means of determining not only their effectiveness but also understanding what these policies look like in action. The qualitative research method is uniquely designed to illustrate the inner workings of macro level policies at the ground level because qualitative research places researchers directly in the environment being studied (Creswell, 2007). Current circumstances mandate that schools and teachers must adapt to global demands in order to prepare students for an interdependent world and to prepare students for jobs that do not yet exist. Of course, while these responses have occurred at the state or macro level, the question emerges: How are public schools and teachers adapting to these newly implemented requirements? Is there a noticeable change in the instructional practice of teachers? It has been documented that even policies at the state level do not always materialize as intended at the local level for various reasons, including passive resistance on the part of teachers (Belfield, & Levin, 2005). However, even as macro policies are designed and implemented, little research exists that illustrates what global education looks like in the classroom. It is clear that at the macro level, such organizations as OECD might make education decisions that eventually trickle down to the local level, yet at the same time, little is known about how these decisions look when implemented by schools.

The purpose of this study is to examine the effectiveness of public schools to provide students with 21st century learning instruction. Additionally, this study examines the interconnected thread that exists between higher education via the college of education and middle grades public schools. Since it is expected that higher education should respond to the demands of globalization and thus prepare future teachers to provide instruction that incorporates global demands in the form of 21st century learning skills, then it seems reasonable to examine how well teachers are actually executing this mandate. Thus, this study has a twofold purpose: one, to analyze the quality of global instruction preparedness that pre-service teachers receive in the higher education environment; and two, to examine the effectiveness of implementation of global practices at the public school level. This study applies critical theory in order to investigate the systemic structure that creates a knowledge economy—a structure that prioritizes certain employment skills. Also, this study applies a critical lens to examine 21st century pedagogy, which has the power to provide agency to individuals or to sustain a stratified status quo. Research in this area is still somewhat limited so this study will enhance our understanding of the connection between globalization, higher education, and public schools.

Research Questions

Overall, this research examines the impact that globalization has on education. In order to accomplish this task, which presents measurable difficulties, this study will examine the ability of a school of education to prepare pre-service teachers to effectively implement a 21st century curriculum in the middle school classroom. *The research process includes interviewing professors at the school of education in order to*

understand the quality and content of 21st century education occurring at the university level. Next, as a means of understanding the connection between higher education and the practical application at the middle school level, interviews of former graduates of the school of education who are currently teaching at the middle school level will be conducted. The interviews, which incorporate a focus on both higher education and middle school, allow for an analysis to be weaved throughout this study that ultimately connects the theoretical teachings at the higher education level to the practical applications at the middle school level. Thus, the research questions focus on understanding the ease with which teachers adhere to 21st century skills and the degree to which higher education has prepared teachers to deliver 21st century content. The research questions are as follows:

- 1) Based on the vision of the Global Vision Tomorrow Initiative, how has the Till Height University's (THU) School of Education (pseudonym) prepared pre-service teachers to provide public education students with a 21st century education?
- 2) How do THU graduates effectively deliver global instruction as defined by teaching 21st century skills?

Definition of Terms

The following integral terms inform this study and thus require a thorough understanding: Globalization, 21st century learning skills, hard skills, soft skills, critical thinking, problem solving, communication, and technology integration. Knowledge of these terms facilitates fluid comprehension of the details of this research study.

Globalization

As mentioned, the foundation of this research study rests upon examining the impact that globalization has on education. Of course, given the various interpretations of the meaning of globalization that individuals possess, a clear definition of globalization must first acknowledge these various perspectives. To begin, it seems that globalization brings to mind ideas about either worldwide economics or historical-cultural dynamics more often prevalent in the social studies curriculum (i.e. the study of societies and their cultures). For the sake of this study, globalization is a process, an active verb, and it is an ongoing, continuous action that directly impacts localities that are globally interconnected. In this process of globalization, the world becomes more integrated and connected via technology; and more standardized via the mass migration of top-down macro level policies, which include education policies. While critics may argue that in the process of standardizing societies due to the reach of globalization localities actually resist the homogenization that results from the process of globalization (Anderson-Levitt, 2003), the actual process that enables the international transmission of standardized practices cannot be overlooked. Therefore, this research underscores the definition of globalization as a process in spite of the reaction it inspires upon the localities that feel threatened due to the reach of global forces.

21st Century Learning Skills

As part of the process of globalization, the integration of world economies resulted in the expansion of the labor pool, which in turn pressured nations to respond by revamping their education systems to adequately prepare citizens to compete in a global economy. The resultant modifications to education incorporated private industry demands

to adequately prepare workers for the job market—a 21st century job market. Thus, 21st Century Learning Skills are “soft” skills deemed necessary to succeed in private industry, especially at a time when students who begin school are prepared for jobs in the future that do not currently exist. Finally, these 21st century skills include higher order thinking (i.e. critical thinking and problem solving), communication, authentic learning, engaged learning, and technology integration.

Hard Skills

Hard skills are a reference to such content areas as math and science. It has been observed that students must learn hard skills in order to succeed in the 21st century. At the same time hard skills are not the only requisite skills for success; it is not enough for students to just know and understand these content areas. However, these skills receive preference over such content areas as liberal arts and social sciences. Finally, hard skills equal technical and analytical abilities (Battle, 2006).

Soft Skills

Soft skills or life skills stand in contrast to hard skills and include such skills as problem solving, critical thinking, and effective communication (World Health Organization, 2003). Companies and employers now view these skills as critically important. These are also similar to the skills highlighted by Wagner (2008) in his book *The global achievement gap*.

Higher Order Thinking

Higher order thinking, which hinges on rigorous academics in the classroom, is an essential skill that trains students to think deeply about problems outside of the classroom. Additionally, higher order thinking “. . . references the level of student

cognition generated by students from the learning experience based on Bloom's taxonomy," (Moersch, 2011, p. 44).

Critical Thinking

Critical thinking, while difficult to measure as an observer, equates to the process of thinking deeply and critically in order to analyze a problem as a means of fully understanding all aspects of the problem.

Problem Solving

Problem solving as a skill involves devising a solution to an open ended problem and incorporating knowledge and creative ideas to solve the problem. Additionally, problem solving is an open ended skill, meaning it does not necessarily possess a right or wrong answer. Finally, problem solving is perhaps one of the most critical functions of 21st Century Learning Skills given the open ended nature of this skill. Essentially, students and future employees must possess the skills to solve problems that lack definite, clear cut solutions and few defining parameters. Problem solving as a skill aligns with real life context and brings into question the reliance on standardized testing as a format to measure student preparedness for college and the workforce.

Authentic Learning

"Authentic connections relate to students applying their learning to real-world situations consistent with one or more 21st Century Skills themes (i.e. Global Awareness; Financial, Economic, Business, and Entrepreneurial Literacy; Health Literacy)," (Moersch, 2011, p. 45).

Engaged Learning

As a term, engaged learning “. . . represents (1) the amount of complex thinking (e.g. problem-solving, decision making, experimental inquiry, inductive-deductive reasoning and (2) the degree of self directed learning occurring by students,” (Moersch, 2011, p. 44). In general, engaged learning is an action within the classroom that teachers control through the quality and depth of the lessons provided to the students.

Communication

Simply put, communication includes written and oral communication. Wagner (2008) states, “[more] than half (52.7%) say [that] Written Communications, which includes writing memos, letters, complex reports clearly and effectively, is ‘very important’ for high school graduates’ successful job performance,” (p. 34).

Technology Integration

Success in the 21st century workplace operates on the notion that employees possess rote comfort and fluid knowledge of technology. Schools must integrate the use of technology into classroom instruction not as a means unto itself but rather as a way to enhance and to facilitate classroom instruction. Within this framework, technology integration then equates to the level of technology utilized in classroom instruction as a manner of supporting lesson delivery.

Significance of the Study

With the shift away from a brawn economy to a knowledge economy, it is imperative that the United States effectively use all resources available to remain competitive, including providing students with access to instruction infused with 21st century learning content. Simultaneously, this transition out of a brawn economy and into

a knowledge economy contributes to the loss of routine manual labor jobs (i.e. brawn economy jobs). In fact, “Between 1969 and 1999, the share of job tasks calling for expert thinking and complex communication rose sharply and steadily; but beginning in the early 1980s the share of tasks calling for routine thinking or routine manual work plummeted,” (Jerald, 2009, p. 4). Additionally, while the creation of low-skill service jobs continues to increase, these low-skill jobs offer low wages, particularly in contrast to high-skilled, high-wage jobs (Jerald, 2009). The underlying point suggests that students must attain enhanced skills as a requisite for entering the higher-skilled, higher paid workforce. For public school students in the United States, education must include 21st century content; otherwise the United States will lose the benefits garnered from well-trained human capital. Conversely, failure to adequately educate the workforce presents the risk of creating an underclass of individuals not fully involved in the social cohesion of the U.S., nor invested in supporting the economic needs of the nation.

As we seek to create globally competitive citizens, it is important that our schools create globally aware citizens who not only compete but also understand how to collaborate at a global level. Evidence suggests that the world is now more interconnected and interdependent. With that said; our students should be able to collaborate across regions and nations. The results from this study will help present evidence that illustrates the level of global preparedness of American public school students to enter the world market. Because there is limited research in this area, the significance of this study is great. Wiggan (2012) emphasizes a need for further research in the area of globalization and education, stating, “In particular, the connection between the geopolitical economy and urban communities and schools has often been overlooked,

and insufficient theorizing on the topic makes it even more obscure,” (p. 61). The research in this study will provide a qualitative examination of teaching at the school level and thus reveal to what extent teachers actually infuse global instruction into their daily lessons. Ultimately, the findings from this study will enable future teachers to adequately implement 21st century skills in the classroom. Also, teacher preparation programs will benefit from this study because it will provide guidance to the process of training future teachers to infuse 21st century instruction in the classroom. Currently it remains unclear how effectively schools and universities understand and implement 21st century instruction. The results of this study will enhance our understanding of the degree and quality of 21st century instruction in education.

Summary

Chapter one established the foundation of this qualitative study by first illustrating the connection between globalization, education, and the job market. As students leave public schools, it is incumbent upon public education to ensure that students receive access to 21st century skills in order to compete and succeed in a global market. Additionally, this chapter demonstrated that higher education has a role in this process since pre-service teachers are on the forefront of teaching students 21st century skills. Chapter one underscored the details of the link that exists between higher education vis a vis the school of education, training pre-service teachers, and the outcome of this training as measured by evaluating actual teacher’s ability to teach 21st century skills.

A qualitative case study is the most effective manner to study this connection because little research exists in this area. While it has been demonstrated that macro global policies trickle down to effect schools at the local level since schools must

implement these policies, actually studying what these policies look like is limited. Thus, chapter one has demonstrated that a need exists for a qualitative case study to understand and evaluate the daily details that comprise globalization in the classroom.

Organization of Dissertation Chapters

The remaining dissertation chapters outline and detail critical components of this research. To begin, chapter two—the literature review—profiles research and ideas that establish the foundation for this research study. In chapter two, the concept of globalization is fully explored as an independent term before it is analyzed as a process within the context of education. The focus in chapter two is to explain the connection between globalization and education and the forces of globalization that influence education at a macro level. Additionally, chapter two reveals that more research must be conducted to examine the micro impact of macro education policies. Essentially, even as education policies are designed and implemented within a hierarchical top-down approach, it remains unclear as to the impact of these policies in the classroom.

Chapter three outlines the research method critical to this particular research study. Because this research seeks to understand a particular phenomenon, which is encapsulated in the following question—how does globalization impact education?—the most appropriate research design is that of multi-case study. The multi-case study allows researchers to explore particular phenomenon in multiple settings. In the case of this research, the multiple settings include the higher education level and the public middle school level. Within all settings, the researcher attempts to uncover how globalization impacts education through interviews, observations, and document analysis.

Chapter four outlines the findings of this research study in direct relationship to the research questions. The results presented in chapter four consist of two components: higher education setting and public middle school setting. Finally, chapter five discusses the findings of this research study in greater detail. The discussion in this chapter applies a critical pedagogy analysis in the examination of the data. The chapter concludes with implications for educators and recommendations for future research.

CHAPTER TWO: REVIEW OF THE LITERATURE

The purpose of this study is to explore the relationship between globalization, preparation of pre-service teachers at the higher education level, and instructional practices at the middle school level. The current global circumstances dictate that students receive instruction with a foundation in 21st century learning skills, including higher order thinking, communication, authentic instruction, and the infusion of technology into daily lesson delivery. These 21st century skills or P21 skills represent globalization in action, since it is the influence of globalization that produced a demand for such skills within the realm of education. In order to understand how contemporary education has reached this crucial time where providing these skills to students is critically important to their future success, it is essential to illustrate the historical trends of globalization and the long-term influence that globalization has had on education. Finally, the review of the literature provides a contextual response to the two research questions central to this study. One, based on the vision of the Global Vision Tomorrow Initiative, how has the Till Height University School of Education prepared pre-service teachers to provide public education students a 21st century education? Two, how do THU graduates effectively deliver global instruction as defined by teaching 21st century skills?

As a result, this chapter reviews the literature on globalization in general, globalization and the knowledge economy, and globalization and education. In doing so,

the chapter, explores globalization's influence on urban schools, the macro to micro impact of globalization on education, the relationship between globalization and higher education, and provides a comparative analysis of global instructional practices. Additionally, this review will situate education within a global context in order to portray the evolving perspective and importance of education globally, which parallels the influence of neoliberalism on globalization and has resulted in the commoditization of education. This review demonstrates the macro to micro impact of globalization on education—an important point because it reveals that macro decisions made at the global level do in fact impact education at the micro or local level. However, in spite of this macro to micro relationship, it still remains clear that research is limited in the area of the actual micro effect on education. Essentially, even as macro education policy decisions are made and then implemented at the local level, the description and manifestation of these macro practices at the local level remains undefined. Finally, this review will provide a comparative analysis in order to provide a context that illustrates the global reach of critical instructional practices.

Globalization

Formulating an active and effective definition of globalization relies upon understanding the long-term historical influence of globalization, as well as the continued interdependence and consequences that occur as a function of globalization. To begin, globalization as a term and as an outcome is pervasive. Globalization is a process, an active verb, and it is an ongoing, continuous action that directly impacts localities that are globally interconnected. In this process of globalization, the world becomes more integrated and connected via technology; and more standardized via the mass migration

of top-down macro level policies, including education policies. In contemporary times, it is difficult to read the paper or watch the news without encountering the term globalization, which typically applies the term to context specific situations. In fact, Stromquist and Monkman (2000) affirm this point, noting that the definition of globalization remains dependent on such perspectives as economic viewpoint, political viewpoint, or cultural viewpoint. Additionally, an individual's epistemological and/or theoretical framework also contributes to the ultimate point of view applied to the definition of globalization. For example, Friedman (2005) presents globalization as a flattening process in which technological innovations such as the installation of fiber optic cables made the world smaller—more interconnected. In support of Friedman's perspective, Gibson-Graham (1996) offer a corroborative definition of globalization, stating globalization is essentially “a set of processes by which the world is rapidly being integrated into production and financial markets, the internationalization of a commodity culture promoted by an increasingly networked global telecommunications system,” (p. 121).

Culturally, not only does globalization possess definitions germane to an individual's perspective, but also, as a worldwide experience, globalization and its impact on the individual have evolved over the course of time (Blackmore, 2000; Currie & Vidovich, 1998; Stromquist & Monkman, 2000). In fact, “While disputably not a new phenomenon, globalization is as much an awareness of the possibilities of new markets, ideas, and technologies and its ideological underpinnings,” (Blackmore, 2000, p. 333). This idea serves as an entry point into a greater discussion about the impact of globalization on individuals, including the rich and the poor, males and females,

minorities and dominant culture individuals, and the working class and the middle class. For example, Kenway and Kelly (2000) explain that through globalization masculine and feminine gender definitions are redefined. Finally, Blackmore (2000) helps us understand that while globalization negatively impacts the lives of many individuals, globalization has also transformed the world through a proliferation of greater access to democratic ideals, with particular credit owed to the internet.

Yet, even as contemporary definitions of globalization emerge, it is necessary to understand these terms in an historical context because they did not materialize in a vacuum. For instance, one perspective holds that globalization not only exists as an experience that has occurred for centuries, but also continues to transform itself over time and can be encapsulated into four different epochs (Coatsworth, 2004). While this categorization of the different epochs may vary from one scholar to another depending on cultural and philosophical backgrounds, Coatsworth's underlying point still serves a purpose. The first globalization cycle spanned from 1492—the year Spain and Portugal began exploration of the Americas—until the 1600s—. During this time frame, colonization and slavery occurred and structured East-West trade routes were established. Note that 1492 designates the beginning of an East-West trade that includes slaves, but the actual commencement of the slave trade is more likely between 1441 and 1444 which coincides with the Portuguese seizing of Africans around Cape Bojador (Thompson, 1987). The second phase emerged as a result of slave trade and slave colonies during the late seventeenth century. The third cycle involved an influx of mass migration and international trade, running from the late nineteenth century until the great depression. Finally, the most recent cycle emerged out of the trade agreements established at the end

of World War II. These epochs of globalization serve as a reminder that globalization in the most simplistic terms requires the cross-pollination of people via the transmission of goods, ideas, and cultures. Over time, people, nations, and societies have become more interconnected, and as technology improved, the ability to connect over greater distances and to even transgress regions of the world has been the outcome. Thus, with that conceptual framework in place, various definitions of globalization emerge, but typically the definitions constitute a conglomeration of technology and exchange of goods across regions.

While Coatsworth's analysis situates globalization in an historical context, it is important to note that globalization as a term and a process possesses a conflicting background. There exists disagreement as to the origins of globalization, not just its impact. For Morrow and Torres (2000), at least three differing perspectives on the origins of globalization persist. One framework places globalization at the origins of civilization and the emergence of universalistic religion. Another perspective on globalization connects the origins of 16th century capitalism with world-systems theory. However, for Morrow and Torres, globalization's roots more likely began in the mid 1960s, and "... the decisive shift came with the literature in the 1970s and 1980s on the so-called "post-Fordist" transformation of production processes as a global process, as well as related accounts of an information society, cultural globalization, or a postmodern culture," (Morrow & Torres 2000, p. 28). Post-Fordism, in this case, is a reference to industrial sector changes, including a transformation from strict, assembly line production models to a post-Fordist economy in which the world economy operates on a global scale. Production in this era is now regional and global. Castells (1996) describes this new

economy as an information economy, and draws a clear distinction between the Fordist and post-Fordist era. Castells (1996) states:

A global economy is something different: it is an economy with the capacity to work as a unit in real time on a planetary scale. While the capitalist mode of production is characterized by its relentless expansion, always trying to overcome limits of time and space, it is only in the late twentieth century that the world was able to become truly global on the basis of the new infrastructure provided by information and communication technologies. (p. 92)

It is this post-Fordist concept that perhaps encapsulates the version and definition of globalization that permeates the current modern outlook on globalization and defines the contemporary philosophical framework with respect to global forces. Finally, the post-Fordist philosophy lends itself to the need for a knowledge economy in which workers cast aside the straight forward approach of the brawn economy to actually incorporate innovation, problem solving, and creativity—all essential “soft skills” recently emerging in the public education focus— into the production model.

While the post-Fordist perspective attempts to define a model of conducting business that coincides with the ideas put forth by Friedman (2005)—a philosophy that perhaps incorporates the best of global practices, the most prominent structural changes to business and education resulted from the infusion of neoliberalism into policymaking decisions at the global level. McChesney (1997) provides a clear description of neoliberalism:

Neoliberal initiatives are characterized as free market policies that encourage private enterprise and consumer choice, reward personal responsibility and

entrepreneurial initiative, and undermine the dead hand of the incompetent, bureaucratic and parasitic government, that can never do good even if well intended, which it rarely is. (p. 7)

From a historical perspective, the initial Keynesian economic policies that served to guide the practices of such institutions as the IMF and World Bank ultimately gave way to neoliberalism. As Peet et al. (2003) explain, the troublesome economic conditions of the 1970s opened the door to acceptance of the current neoliberal economic policies. In the end, neoliberalism is the ideological framework that now shapes the new world order.

Globalization and Education

As an ideology in practice, neoliberalism emphasizes three key policy guidelines: “deregulation, privatization, and liberalization” (Stromquist, 2002, p. 26). In general, the overarching theme is one that removes government regulations in order to promote a free market. Privatization reigns supreme over the public sector. Apple (2006) affirms this point concluding that in the rhetorical battle between the political left and the political right, neoliberalism portrays privatization as a positive benefit to the public sector. So from within this arrangement, how does globalization thus affect education? To begin, neoliberal policies emphasize privatization of public schools as a means of improving education overall. School choice in the name of vouchers and charter schools comprise one component utilized by neoliberals to promote private over public control of education (Apple, 2006).

The argument in support of school choice rests on the principle of competition. In fact, “The argument in favor of parental choice asserts that enabling parents to select schools promotes competition among schools and that, through this process, such choice

will improve school performance and give all children access to a good education,” (Stromquist, 2002, p 45). Somehow, when schools must compete against each other for students, they will improve, even if the resources are not made available to foster positive change. One problem among many with this practice, as Carnoy (2000) explains, is “cream skimming.” Essentially, schools will attract the best students through voucher programs, and bad schools will end up with the most challenging students. As a result, privatization through vouchers merely maintains the status quo because this process further stratifies society rather than improving schools and enhancing the life chances for struggling students.

Furthermore, neoliberal policies rely on stringent accountability measures in public education, and these policies surreptitiously promote the privatization of education. Apple (2006) succinctly clarifies the relationship between accountability and privatization as one that relies on standardized data, meaning test scores, to enable comparisons among products (i.e. education). Once consumers can compare schools from top to bottom, they will undoubtedly view private schools as superior to public schools. The point is particularly momentous in today’s educational landscape, which is suffused with the legislation known as No Child Left Behind (NCLB). Through NCLB, as McDonnell (2005) explains, all students must test in specific subjects, and the test results must be disaggregated by subgroups. A subgroup essentially equates to a form of classification (i.e. race, gender, and SES). Finally, the success of a school, the determination of whether or not a school receives a passing or failing grade, rests on the performance of the students in all subgroups. From this point emerges the derivation of

the title 'No Child Left Behind' because all subgroups must pass in order for the whole school to pass; NCLB is an all or nothing accountability model (McDonnell, 2005).

On the surface, this accountability model likely makes sense to the general public. After all, student success is a natural goal. However, in spite of the intentions behind a strict accountability model, beneath the façade of the rhetorical language, there exist structural flaws with this educational strategy. Lipman's (2004) analysis of the implementation of a high stakes accountability testing system in Chicago exposes the dangers of this practice. To begin, in Chicago's efforts to become a world class city, various neoliberal policies were implemented in the education realm in order to promote improvement throughout the struggling school system. One of the policies applied to the Chicago Public Schools (CPS) was a high stakes testing system, which was theoretically designed to help schools improve. Yet, as Lipman explains, even if the underlying premise was to force schools to improve, the schools spent more time teaching to the test in order to avoid public shame. Instead of improving the schools, the high stakes model further stratified the schools and did not improve the performance of struggling students. The underlying theme throughout the process of implementing privatization, standardization, and high stakes testing into the regular education practices connects back to the influence of globalization on education. Essentially, through the pressure of globalization, policy makers rely on neoliberal ideas when making decisions about the function and design of public education. Neoliberalism is an active agent in the process of globalization.

Globalization, Comparative Analysis, and Instructional Practices

While much of the analysis regarding globalization's impact on education revolves around the influence of neoliberal practices, the discussion must also pivot towards a comparative analysis. In the comparative analysis of globalization's impact on education, educators and policy makers begin to understand the structural differences that exist between American public schools and international schools, and through this global comparative analysis emerges a pattern of global instructional practices with commonalities that clearly inform the high yield methods now currently referred to as 21st century learning skills.

At the global level the use of key international academic indicators measure the performance of students on standardized tests and as a result allow for international comparisons of not only the students but also the national education systems responsible for educating these students. These measures include the Program for International Student Assessment (PISA), the Trends in International Mathematics and Science Study (TIMSS), and the Progress in International Reading and Literacy Study (PIRLS). PISA, to begin, was developed in 1997 by the Organization for Economic Cooperation and Development (OECD) with the purpose of evaluating education systems worldwide. PISA tests 15 year old students in more than seventy countries in order to determine their ability to apply knowledge in real world context and to determine their ability to participate in society (*OECD Programme for International Student Assessment (PISA)*). Since 1997, every three years PISA has administered tests in reading, mathematics, and science, rotating from one content area to the next for each test administration cycle. The 2012 data collection process measures student performance in mathematics and also

includes an optional assessment measuring financial literacy. Ultimately, the PISA data enables governments to make informed education policy decisions (*OECD Programme for International Student Assessment (PISA)*).

The most recent PISA results, the 2009 test which measured reading, reveals that U.S. students scored an average of 500, which was not “measurably different from the OECD average score (493),” (Fleischman, Hopstock, Pelczar, & Shelley, 2010). More notably, the following six nations scored above United States average: South Korea, Finland, Canada, New Zealand, Japan, and Australia. Of these nations scoring above the U.S., education experts recently profiled the school systems of South Korea and Finland (Darling-Hammond, 2010; Sahlberg, 2011) as a means of comparing the academic success experienced in these nations in contrast to the educational outcomes in the United States. PISA data, in particular, is designed to measure academic performance differences, which then serve as indicators for further study. However, as PISA indicates, the data collected through these assessments is not designed to provide information about instructional practices or curriculum design, but rather, information of this nature can be gleaned from the TIMSS assessments.

While PISA provides policy makers with academic indicators that reveal differences in student performance, TIMSS not only collects academic data but also collects survey data designed to delineate differences in national education systems. Through the use of survey questionnaires, TIMSS gathers information from students about their background, attitudes, and school experiences; from teachers about instructional practices, resources, and background and training; and from schools about characteristics and resources (Gonzales et al., 2008). Additionally, TIMSS includes a

video study in which video of actual instruction of select classrooms of participating TIMSS countries is gathered and analyzed. The TIMSS video study “provides educators and policy makers a better understanding of how national, regional, and local policies related to curriculum and instruction are being implemented in the classroom,” (U.S. Department of Education, National Center for Education Statistics, 2003). In general, the National Center for Education Statistics coordinates the data gathering process of TIMSS through the International Association for the Evaluation of Educational Achievement (IEA) Gonzales et al., 2008). Finally, the test first emerged in 1995, and data has since been collected in 1999, 2003, 2007, and in 2011—at which point more than 60 countries and jurisdictions participated.

PIRLS, which operates under the same administration umbrella as TIMSS, measures the performance in reading achievement for 4th grade students worldwide and began in 2001. The most recent PIRLS cycle—PIRLS 2011—assesses not only reading comprehension but also utilizes questionnaires designed to assess the experiences of 4th graders learning to read at home and at school (Mullis et. al, 2007). Approximately 53 countries and within several countries specific benchmarking participants will take part in PIRLS 2011. The most recent collected and analyzed PIRLS data—PIRLS 2006—underscore important outcomes and educational trends: 1) the Russian Federation, Singapore, and Hong Kong SAR were the top performing countries; 2) in general, girls achieved higher reading scores than boys in all participating countries except Luxembourg and Spain; 3) a positive relationship existed between parents engaging children in early literacy skills prior to starting school and 4th grade reading achievement; and 4) the presence of books in the home revealed a strong positive relationship to

reading achievement levels (Mullis et. al, 2007). While these results only highlight a few specific academic trends, what is more important and revealing is the contextual information provided about family background, teacher instructional methods, and the school in general. These data sets enable policy makers to then examine trends and design and implement effective policies within their own national school systems.

With the process of gathering international academic data in place, policy makers and educators essentially possess the tools to compare and analyze national school systems, and as both PIRLS and TIMSS indicate, policy makers can also examine background data that reveals information about instructional practices, curriculum, parental involvement, etc. In *The flat world and education* (2010), Darling-Hammond utilizes these data sources to analyze the performance of American students in comparison to international students. One immediate conclusion is that the nations of Finland, South Korea, and Singapore have all found ways to outperform the rest of the world as measured by these international academic indicators. Additionally, Darling-Hammond (2010) discerned:

Inequality has an enormous influence on U.S. performance. As Figure 1.2 shows, the distance between the average PISA scale score for Asian and White students, on the one hand, and African American and Hispanic students, on the other, is equal to the distance between the U.S. average and that of the highest-scoring countries. (p. 11)

Throughout Darling-Hammond's analysis, several themes emerge: 1) American schools do not adequately educate all students as well as do top-performing nations; and 2) policies and educational practices in the United States must change in order to adequately

prepare all American students to compete globally. Of course, evidence of policy recommendations driven by international data does exist. For example, the recommendation to employ 10,000 math and science teachers to directly impact 10 million minds corroborates this point (Committee on Prospering in the Global Economy of the 21st Century: An Agenda for American Science and Technology, National Academy of Sciences, National Academy of Engineering, Institute of Medicine, 2007). The current status of education mandates significant systemic changes to remain competitive in a global economy.

Other recent publications underscore the differences between American public schools and their international counterparts, including the work of Carnoy and Sahlberg. For Carnoy (2007), comparisons between Cuba, Brazil, and Chile reveal not only structural differences within the school systems between each nation but also differences in the approach to curriculum and instruction. These differences illustrate the means by which Cuba manages to achieve great academic success at a very basic level through instructional focus and consistency in all schools throughout the small island nation. The lessons learned from this analysis offer American educators ideas about possible instructional methods for public schools in the United States. Sahlberg (2011), in contrast, profiles the great success that Finland has attained through redesigning its school system in order to become the premier school system in the world by multiple global measures.

It must be noted that the underperformance of American students points to troubling statistics pertaining to quality of life concerns for individuals as well as significant responsibilities that must be collectively shouldered by all members of

American society. Consider the impact of high school dropouts on the economy and other public services. Students who do not graduate from high school cost U.S. taxpayers \$260,000 in lost income, taxes, and productivity (The Annie E. Casey Foundation, 2010). A predictor of student success as measured by graduating from high school is literacy, and more specifically, reading proficiency at an early age. For students who fail to demonstrate reading proficiency by the end of third grade as measured by the National Assessment of Education Progress (NAEP) the fourth grade reading curriculum will be too challenging to comprehend (The Annie E. Casey Foundation, 2010). Additionally, demographics matter since 83% of low-income students “. . . are at increased risk of failing to graduate from high school on time because they won’t be able to meet NAEP’s proficient reading level by the end of third grade,” (The Annie E. Casey Foundation, 2010, p. 11). More importantly, 83% of low-income 4th graders scored below proficient on the 2009 NAEP test (The Annie Casey Foundation, 2010). The evidence suggests that American public schools do not adequately educate all students—a point that has been well documented; however, this general student underperformance creates significant problems for the nation as a whole in a globalized economy. And these data points illustrate deeper structural troubles in the United States as well. Wiggan (2012) relies on the synthesis of a various data points, including numbers that reveal a wealth gap in the U.S. between White and African American households. This wealth gap serves as a symptom of “. . . structural racism and sexism in employment practices and in access to education, as educational outcomes are connected to social-class and labor market dynamics,” (Wiggan, 2012, p. 31). Success in the competitive, interdependent world relies not only on educating our students at a high achievement level but ensuring that all

of our students, regardless of race or socioeconomic status receive a 21st century education.

Globalization and the Knowledge Economy

An outcome of globalization, as measured over time, has been the standardization of numerous commodities, including education—which now exists as a primary component of the knowledge economy. This standardizing process occurs as a result of the interdependence of the world (Anderson-Levitt, 2003), which is caused by the unification of societies as practices and processes are shared and become standardized—thus inadvertently standardizing societies as well (Barber, 1995). Various international agencies partake in this standardizing process, including OECD, IMF, World Bank, and the WTO (Spring, 2009). For example, as nations seek financial assistance from the World Bank, stipulations are attached to the money loaned to these nations, which in general is a reference to structural adjustment (Abouharb & Cingranelli, 2007). However, while the nations may need financial assistance, the stipulations typically consist of deregulating markets and infusing policies of privatization where applicable, which includes the realm of education. Thus, a primary tenet of education reform at the international level consists of privatization. Additionally, the notion of the world becoming standardized as a result of globalization and the implications of global forces, whether economic or cultural, rests in a theoretical framework known as world culture theory. It is the argument of world culture theorists that as the forces of globalization spread consistent and standardized practices, the world becomes more homogenized, which is perhaps a natural outcome of the suffusion of policies via globally dominant transnational forces (Anderson-Levitt, 2003). The point stands in contrast to an

anthropological view which holds that even as global forces spread in a unified and standardized manner, at the local level individuals implement policies as best fit their needs or even exercise acts of resistance and non-compliance against the global policies that reach the local level (Anderson-Levitt, 2003). In fact, the idea of local resistance and/or implementation of global ideas at the local level infuses the term known as glocalization. As Anderson-Levitt (2003) explains, glocalization "... references the interplay between globalizing and localizing forces," (p. 35).

It is this dichotomy between global and local forces that underscores the foundation of the research in this study; therefore, thoroughly exploring the foundation of this dual worldview of globalization establishes the importance of researching the local effect of macro policies. If global forces produce global policies that are enacted at the local level, it must be asked: what do global instructional practices look like? Anderson-Levitt (2003) underscores this point, stating, "World culture theorists have rarely described what actually happens inside the classroom," (p.7). Currently, it is clear that globalization has produced a unified global educational expectation. An OECD study outlined the critical skills that students must possess to succeed in a knowledge economy, and it also illustrated the expanse and standardization of international educational expectations (Nam, 2009). The study not only explains the skills needed but also underscores the connection between globalization, economic forces, and education. It has been documented that as the world has become more computerized, a shift in skills has occurred (Nam, 2009).

Essentially, a greater emphasis now falls on problem solving over routine, basic knowledge. Additionally, OECD nations have responded to these new demands, as

national education systems have implemented curriculums focused on generic, or transferrable skills, which fall into the category of “skills of the 21st century or higher order skills,” (Grubb, 2006). The skills typically fall into two categories: soft skills and hard skills. Soft skills equate to such skills as critical thinking, problem solving, and collaboration; while hard skills result from STEM education, including knowledge of math and science (Nam, 2009). Additionally, the skills have been culled from employer surveys, and include problem solving, teamwork, information analysis, critical thinking and reasoning skills (Grubb, 2006).

In the United States, the impact of globalization on education is immediately evident as measured by the adoption and implementation of the Partnership for 21st Century Skills (P21) and the Common Core State Standards Initiative. Both initiatives focus on preparing students to succeed in a knowledge economy. P21 emphasizes preparing students for a global economy that demands innovation through offering students the 3Rs and 4Cs: Critical thinking and problem solving, Communication, Collaboration, Creativity and innovation (Partnership for 21st Century Skills, 2011). Additionally, the Common Core Standards have now been adopted by 45 states and include the following descriptive statement: “Are informed by other top performing countries, so that all students are prepared to succeed in our global economy and society,” (*Introduction to the Common Core state standards*, 2010). Additionally, when referencing globalization in relation to education, the term “21st century skills” or some version of this term usually emerges. In other words, 21st century skills is an outgrowth of globalization and is thus a term synonymous with globalization.

In fact, Wagner (2008) helps to explain the relationship between 21st century skills and globalization. A global achievement gap exists between the needs of employers—21st century skills that include critical thinking, problem solving, and communication—and the actual skills students graduate with. In spite of the demands that employers place on workforce readiness skills, which is a clear example of globalization’s impact on public education, public schools struggle to provide a universal standard of education to all students. Finally, while global demands require that nations effectively educate their citizens because these citizens represent the human capital needed for a society to succeed in a knowledge economy, it is clear that public schools in the United States produce stratified academic outcomes. In Darling-Hammond’s (2010) assessment of this scenario, not all students receive an education rich in 21st century learning skills; instead such a curriculum is reserved for “...the most advantaged students in the United States,” (p. 54). Failure to provide quality education to all students ultimately results in a diminished workforce that cannot compete in a global economy.

Globalization and Urban Schools

Sassen (2006) explains, “Four types of places, above all others, symbolize the new forms of economic globalization: export processing zones, offshore banking centers, high-tech districts, and global cities,” (p. 31). Within Sassen’s categorization, cities, with their specialized services (i.e. financial, legal, managerial, etc), are thus positioned as the organizational epicenters of the global structure. Yet, while cities may exist on a spectrum that encompasses such characteristics as population density, economic robustness, and geographic location, not all cities actually fit the global city criteria as outlined by Sassen. In Sassen’s analysis, global cities serve as a “command point in the

world economy,” offer “key locations and marketplaces for the leading industries of the current period—finance and specialized services for firms,” and are “major sites of production, including the production of innovations, for these industries,” (p. 7).

According to the global city definition, there exist about 40 cities that comprise these characteristics. Examples include London, Amsterdam, Mumbai, Sao Paulo, Chicago, and Los Angeles.

Because cities are uniquely positioned within the global context, it thus becomes necessary to examine the trickle-down effect that globalization has on cities, particularly the social ramifications on the citizens who reside in the cities. As global cities seek to compete within the global spectrum, it becomes necessary for the cities to enter a realm in which macro policies greatly impact the locality. One outcome is a workforce that consists of high-skilled, service professionals and low-skilled, wage laborers (Lipman, 2004, Sassen, 2006). This dichotomy of high wage and low wage citizenship within a city results in various structural outcomes. For example, city leadership tends to invest in infrastructure designed to serve the needs of high skilled workers, which includes skyscrapers and entertainment complexes and the gentrification of urban neighborhoods (Hackworth, 2007; Lipman, 2004; Sassen, 2006). At the same time, there emerges a subjugation of women, immigrants, and low wage/skilled workers whose purpose is to serve the needs of the high-skilled wage industry in the capacity of janitors, repairmen, restaurant workers, and sex-traffickers, to name some relevant categories (Lipman, 2004; Sassen, 2006).

Cities pursue this dual path as part of a larger, neoliberal agenda (Hackworth, 2007; Lipman, 2004) with the purpose of “entrepreneurial urban governance,”

(Hackworth, p. 15). Remember that the central tenets of neoliberalism mandate the pursuit of deregulation of the markets and privatization, including the privatization of public responsibilities like education (Apple, 2006). Additionally, neoliberalism is a global policy that links directly to such macro institutions as the World Bank, IMF, and WTO (Peet et al, 2003; Stieglitz, 2003). Rephrased, there exists a clear linkage between globalization and its local impact via neoliberal policies. Yet, as cities pursue this economic path, the outcomes for low-wage/skilled laborers are acute and persistent (Sassen, 2006). It should be noted that proponents of neoliberal policies argue that neoliberal practices are the natural outcome of the economics of globalization. However, as Morrow & Torres (2000) point out, these policies represent ideological policies “. . . as a specific response to globalization and international competition,” (p.45). Essentially, as Lipman explains, neoliberal policies do not have to be the natural outgrowth of globalization, and individuals, in fact, should contest neoliberal policies.

With respect to education, neoliberal policies result in an overemphasis on standardization of the curriculum, testing and accountability, and the privatization of public schools (Apple, 2006). These policies then produce stratified school systems in which students in poverty and minority students are clustered together in low-performing schools while white and middle class students attend schools with little diversity (Apple 2006; Lipman, 2004). Orfield's 2001 study corroborates this point: from 1980 to 1998, Blacks and Latinos have attended schools that have become increasingly less White with respect to school composition. In 1980 Blacks attended schools that were 36.2% white compared to 1998 when the schools were 31.7% White. For Latinos, schools in 1980 were 35.5% White in comparison to 1998, in which schools were 29.1% White (Orfield,

2001). Additionally, from 1968 to 2005, public school demographics on the whole have altered significantly. The White population in public schools during this time frame decreased by 20%; simultaneously, the Latino population increased by 38%, and the Black population increased by 33% (Orfield & Lee, 2007). The point is not to insinuate that neoliberalism has directly contributed to the re-segregation of American public schools; however, Orfield substantiates the notion that our schools are currently resegregating concurrently with the implementation of neoliberal educational practices. Yet, in practical terms, it is possible to connect the dots and place responsibility for this resegregation on neoliberalism. Consider this notion, in public education various outside groups seek to influence the direction and structure of American schools. The Broad Foundation serves as an excellent example, as Ravitch (2010) states, “The Broad Foundation pursues strategies that would deprofessionalize education, uses bonuses to motivate (or “incentivize”) teachers and students, and seeks to replace neighborhood schools with a competitive marketplace of choices,” (p. 217). Utilizing a “marketplace of choices” and offering incentives to motivate teachers clearly aligns with neoliberal economic policies that dictate a market based approach to education and deregulation when possible.

The pursuit of these neoliberal policies tends to result in drastic academic and professional outcomes for poor and minority students, particularly if they attend racially and economically segregated schools. A correlational cause for this racial segregation rests upon the impact of globalization on cities, particularly those cities producing gentrified neighborhoods. Cities, in pursuit of global competition, end up with a dual workforce of high-income wage earners and low-income wage earners who coexist

within the same geographical location but not necessarily the same neighborhoods (Lipman, 2004; Massey & Fischer, 2003). Concurrently, neighborhoods gentrify along socio-economic terms that, in many cases produce abysmal outcomes for students who reside in high poverty neighborhoods since gentrified neighborhoods lead to the segregated schools as outlined by Orfield above. With respect to cities, Holme and Wells (2008) explain,

Looking across metropolitan areas, we see that poverty and its negative effects on school districts reflect such high levels of segregation by race and class that the poorer districts simply lack more than a handful of “better-performing schools.” In fact, according to the U.S. Department of Education, while only 41 percent of Title I schools in the United States were in the highest-poverty districts, 73 percent of program improvement schools were in those districts. (p 151)

It is through globalization that cities, intentionally or by de facto policies, gentrify and become segregated. The segregation of housing then becomes the driving force that influences public education due primarily to the notion that schools merely reflect the neighborhoods they serve.

Due to globalization and neoliberal policies, the line of segregation which begins with housing and ends with schools and students matters for many reasons, primary among these reasons includes the impact on academic achievement and professional outcomes. Darling-Hammond (2010) cites several recent studies and statistics which explain that the SES status of a student’s school correlates more strongly to a student’s achievement than does the student’s own SES status. A middle class student attending a high poverty school will not perform at the equivalent academic level as a middle class

student attending a low-poverty school. It thus stands to reason that this scenario only results in stunted opportunities for individuals who attend high poverty schools. In fact, a recent Civil Rights Project study revealed that in the Los Angeles community since The Great Recession of 2007, unemployment rates for individuals without a diploma have increased by 18.6%; for individuals with a diploma, the rate increased by 14.4%; and for those individuals with a bachelor's degree, the rate increased by 6.3% (Mordechay, 2011). Ultimately, the literature points to an era of globalization combined with an economically precarious scenario in which our schools, more than ever, must provide educational opportunities for all students. In a larger context, it is also necessary to highlight that minorities will comprise the majority of students by 2023, the majority of working-age Americans by 2039, and the majority of Americans by 2042 (Jerald, 2009). Furthermore, a Conference Board survey of employers “. . . placed the ability to handle diversity among the top five work-related skills they expect to increase in importance over the next five years,” (Jerald, 2009, p. 16). Yet, structurally, through neoliberal practices that emphasize privatization our public schools are not organized to provide success for all students. Wiggan (2009) explains, “As privatized education benefits those who can afford to pay for higher quality schooling, the lower class is often relegated to an inferior education,” (p. 26). Thus, it appears that the structural composition of our schools, which results from the forces of globalization via neoliberal economic policies, need reform efforts designed to promote equitable education for all citizens in a global market.

Globalization and Higher Education

Globalization manifests itself in the realm of higher education via a recurrent theme captured by Hutcherson (2011) known as “global competitiveness.” Higher education, in essence, represents the pathway to economic success individually and also nationally, which thus dictates that in order to remain globally competitive individuals must seek pathways to pursue higher education as a means of succeeding in a knowledge economy. This idea of global competitiveness, however, must be situated within a historical context in order to understand the meaning and influence of this philosophy. It is documented that specific historical conditions rendered higher education, willingly or unwillingly, to structural changes (Hutcherson, 2011; Olssen & Peters, 2005). The 1970s oil crisis specifically altered the economy, which not only forced individuals to question the global power and status of the United States, but also established circumstances that would restructure the relationship between the individual and higher education (Hutcherson, 2011; Souto-Otero, 2011). Essentially at that time neoliberal practices began to infuse education in every facet, including both compulsory education and higher education. The outcome of neoliberal philosophies at the higher education level resulted in a business-like approach to schooling for the university and the student. As Hutcherson explains, “. . . college-bound students in the 1970s, eyeing a job market no longer welcoming to generic college graduates, began to rapidly identify ‘To get a better job’ as the primary reason for attending college. In contrast, 1960s college-bound students more readily identified such goals as ‘To learn more about life,’” (p. 55) as a higher education priority.

While globalization should not specifically mean or equate to neoliberalism, since as Olssen and Peters (2005) point out, neoliberalism is just one potential global economic response. However, it appears that neoliberalism, which includes deregulation, privatization, and an overall business approach to education, has been the chosen methodology for higher education. Embodied in this change is a belief in such values as self-responsibility, individualization, excellence and efficiency, choice, decentralization, and economic cutbacks (Olssen, 2004). As Giroux (2003) explains, education is a tool of indoctrination into capitalist values along with global competitiveness (Brown, et al, 2001; Souto-Otero, 2007). The idea that the purpose and focus of higher education has transformed due to the forces of globalization illustrates the business influence via neoliberal practices within the realm of globalization.

The influence of globalization on higher education clearly surfaced in the commission report known as *Global Vision Tomorrow* published in December, 2007. *Global Vision Tomorrow* (2007) is the outgrowth of a commission comprised of state education and business leaders with the purpose of determining how the state's higher education system can meet 21st century challenges—both present and future. Through this initiative, *Global Vision Tomorrow* sought to provide a framework in which the higher education system could fulfill its mission of “teaching, research and scholarship, and public service,” (University General Administration, 2007, p. 2). It must be noted that in this case, the higher education system is a reference to not only the flag ship university but also to 17 affiliated institutions of higher education within the state. The findings and suggestions were grouped into seven specific categories as follows:

4.1 Our Global Readiness

4.2 Our citizens and Their Future: Access to Higher Education

4.3 Our children and Their Future: Improving Public Education

4.4 Our Communities and Their Economic Transformation

4.5 Our Health

4.6 Our Environment

4.7 Our Universities' Outreach and Engagement

Each section includes a description of the current circumstances and prescribed solutions designed to remedy the determined problem.

It is evident from examination of *Global Vision Tomorrow* that a business aspect has influenced the analysis of and solution to problems within the state. For example, goal 4.1 (Global Readiness), highlights deficiencies in “hard skills” and “soft skills.” “Hard skills” represent skills likely taught in a STEM (Science Technology Engineering and Math) focused curriculum. “Soft skills,” however, equate to such skills as critical thinking, teamwork, problem solving, and use of technology. It is this document that serves as a roadmap for higher education as institutions throughout the state implement measures to prepare students to succeed in the knowledge economy. Finally, analyzing the details of *Global Vision Tomorrow* allows for an understanding of the means by which students in the state are impacted by globalization, which includes students within higher education and at public K-12 institutions. As *Global Vision Tomorrow* indicates, colleges and universities train and prepare future teachers to enter public schools with the skills needed to prepare students for success in a globalized environment.

Summary

Chapter two discussed the connection between globalization and education by illustrating the macro level dimension, especially neoliberalism, and its downward pressure on nations, states, and localities. Lipman's (2004) thorough explanation of globalization's influence on public education in *High stakes education* clearly demonstrates the outcome of this late 20th and early 21st century phenomenon. Additionally, chapter two highlighted the role of international test data in influencing the decisions made by policy makers when designing education policy. However, what is most evident from the review of the literature is that a need exists to examine via qualitative research methods the impact that global decisions have on education at the local level and the influence of globalization on 21st century learning skills. The literature suggests the importance of 21st century learning skills as a means of achieving success in the knowledge economy. Yet, it is not clear how effectively 21st century skills are implemented at the classroom level through lesson design and teacher instruction. Therefore, more research must be conducted in this area in order to effectively understand what global instruction looks like so that schools promote fidelity between 21st century skills and the implementation of these skills in the classroom. Chapter three will explain the process of creating a qualitative research design that allows for effective data gathering and analysis to understand how globalization impacts education at the local level.

CHAPTER THREE: RESEARCH METHOD

Chapter three outlines the research method used for this dissertation, including the structure of the research, sample selection, data gathering process, treatment of the data, definition of terms, limitations of the research method, and basic assumptions. The focus throughout this chapter is to delineate the research method needed to respond to two critical research questions. One, based on the vision of the Global Vision Tomorrow Initiative, how has the Till Height University (THU) School of Education prepared pre-service teachers to provide public education students a 21st century education? Two, how do THU graduates effectively deliver global instruction as defined by teaching 21st century skills? For this research study, 21st century skills or at times P21 skills represent globalization in action, which, as has been established in previous chapters, requires that teachers implement instructional practices laden with 21st century skills (i.e. higher order thinking, communication, authentic learning, engaged learning, and technology integration). Finally, the multiple case study qualitative research method as an overarching research instrument provides the framework needed to gather rich data that reveals the realities and nuances of specific, unified cases (Stake, 2006; Yin, 2009).

Role of the Researcher

At this point, it is important to clarify the researcher's position within the framework of this study. The researcher is an assistant principal in a large, urban school system, and as an administrator, the researcher worked at two different schools—one at

the elementary level and one at the middle school level. The researcher went through the North Carolina Principal Fellows Program in order to obtain a Masters in School Administration. This point illustrates a dedication to school leadership. It's also important to note that the researcher taught middle school language arts for four years before becoming an assistant principal, which thus demonstrates a literacy background. During this time as a teacher, the researcher frequently questioned the wisdom of the administrative decisions made at school. But now, as an assistant principal reflecting back as a teacher, the researcher feels equipped to understand and appreciate the decisions the administrators made at the time.

Background clearly influences perspective; this is an inescapable fact. However, it is important for the sake of subjectivity to declare that the researcher considers himself a teacher's administrator. In other words, at best, the researcher tends to view problems through the eyes of a teacher; at worst, the researcher attempts to remain sympathetic to the needs of the teachers when making decisions. The teacher perspective greatly influences the researcher's outlook and determination for this research study. Overall, the researcher hopes to present information that illustrates the challenges teachers face when trying to meet the demands of globalization in the classroom. Simultaneously, as an administrator the researcher has high expectations of what the teachers should be doing in the classroom. As a result, the researcher will balance this bias of perspective in order to examine the classroom and teachers in a neutral manner and in order to present the findings in an objective fashion.

As a middle school administrator and doctoral student, understanding the influence of globalization on education bears particular importance in the current

dynamic, education environment. An administrator's job description involves observing teachers in order to assess their capacity to implement 21st century instruction. Since the researcher is professionally familiar with the middle school curriculum as well as the role of higher education in preparing teachers for instruction at this level, the researcher has a unique interest in understanding the connection that exists between higher education instruction of pre-service teachers and their ability to deliver instruction that fulfills the university objectives at the middle school setting. Finally, while one of the middle schools participating in this research study is also the school in which the researcher works as an assistant principal, careful measures will be taken to bracket the data collected at this site in order to account for any biases or issues of power that might emerge. All data from this site will be analyzed with particular attention paid to the influence of power that emerges in a researcher-participant relationship that also involves superior and subordinate employees.

Theoretical Framework

While the primary focus of this study examines the impact of globalization on education through an analysis of the conceptualization of globalization and middle school teacher instructional practices, the overall premise of this study rests upon the foundation of critical theory. To begin, critical theory is a theoretical framework that enables the thorough examination of the structure of society, including relationships of power involving an oppressor and oppressed, in order to deconstruct the rules and assumptions that sustain these relationships as a means of transforming society (deMarrais, & LeCompte, 1999). The critical lens used to examine uneven power relationships enables the emergence of personal agency, and the sense of agency serves as a tool to disrupt the

status quo of power and structure in society (deMarrais, & LeCompte, 1999). Several important questions must be posed in the process of critically examining societal structures and institutions, including,

What are the sources of inequality and oppression in society?

How do individuals experience life in social organizations?

How can individuals achieve autonomy in the face of societal oppression?

How are language and communication patterns used to oppress people?

How do people construct positive and negative identities? (deMarrais, & LeCompte, 1999, p. 28)

These questions provide a foundation to thoroughly and critically examine power relationships within the school setting.

The work of Paulo Freire, the Brazilian educator, demonstrates this process of critical examination in action. Freire (2000) understood that social stratification occurs within schools due to the implementation of a bifurcated curriculum—one of power and one of oppression. As a result, Freire advocates critical consciousness as a process of overcoming oppression. As an extension of critical theory, critical pedagogy guides the instructional process in which teachers engage as critical agents debunking social power relationships. Giroux (1991) outlines several guiding principles that underscore the role of critical pedagogy as a function of critical theory. These principles include defining education as a process of producing political subjects, not just knowledge. Also, critical pedagogy must involve ethics, and students must understand the variety of identities and their relationship to social forces. Essentially, for Giroux, education via critical pedagogy

serves as a tool to redefine the power relationships in order to promote a pluralistic and democratic society.

With respect to globalization and education, critical theory serves as an integral tool necessary to examine the relationship between the teacher and student as well as the role of the curriculum within this relationship. Through critical theory, examining the student-teacher relationship will reveal the role of power within this relationship as well as the ability of the teacher to contribute to the student's sense of agency. Additionally, the curriculum, and the delivery of the curriculum, also point to the role of critical pedagogy in the classroom. In general, the premise of this research study suggests that globalization has influenced the curriculum at the local level; thus, the use of a critical lens will allow the researcher to thoroughly examine this relationship. How does the teacher empower the student to succeed within the classroom? Does the teacher provide space for the student to manipulate the curriculum in a manner that enables the student to relate to the content? Conversely, does the teacher apply a strict adherence to the curriculum and stifle the student's agency? These questions serve as a guide to critically examine the role of globalization within the classroom. Finally, if education is the pathway to success, which is the underlying theme of the knowledge economy, then a critical examination of this curriculum is warranted in order to ensure that education acts as a tool of empowerment rather than a bludgeon for stratification.

Case Study Method

The primary objective for this research study is to understand the instructional practices that result due to the influence of globalization on education at both the higher education level and the compulsory public education level. Specifically, what does 21st

century instruction look like in the classroom? While international data (i.e. TIMSS and PIRLS) clearly underscores differences in academic achievement between students in various nations, this data does not render specific details about instructional practices as they relate to the influence of globalization within the classroom. Additionally, it is apparent that 21st century instructional practices stem from global forces, yet what is less understood is the outcome of these decisions at the micro level—specifically, as in the case of this research study, the quality and appearance of 21st century instructional practices within the classroom. Thus the research method that enables in-depth analysis that does not merely extrapolate meaning from quantitative data but rather portrays the influence of globalization in action is the case study qualitative research method.

Through the process of document analysis, participant observation, and interviews—qualities of case study research (Stake, 2006)—the data will illustrate the influence of globalization at the higher education level as well as characteristics of instructional practices that result from the impact of globalization at the middle school level.

Additionally, for this research study, a multiple case study method instead of just a single case study approach serves as the research design and process utilized to thoroughly examine the research questions because a multiple case study method allows the researcher to study the phenomenon of globalization at various settings: the higher education level and at multiple middle school settings. Multiple case study qualitative research “. . . is a research design for closely examining several cases linked together. It is also a design for studying an issue or phenomenon at sites that have no programmatic link,” (Stake, 2006, p. 1). Chapter three illustrates the dynamics of the multiple case research method as the most suitable means to clearly respond to the research questions.

In fact, as a research method, the multiple case study approach is best suited to respond to “how?” type questions, which are the questions posed in this study (Yin, 2009).

Additionally, several key terms infuse the language and framework of this research study. These terms include globalization, 21st century learning skills, hard skills, soft skills, higher order thinking (i.e. critical thinking and problem solving), communication, authentic learning, engaged learning, and technology integration. While these terms were succinctly defined in chapter one, it is necessary to highlight their importance within the research design. These terms serve as the tool needed to measure the degree of globalization’s impact on education.

Instrumentation

Because of the nature of the research questions in this study (i.e. “how?” questions), questions that seek a deeper understanding about a particular phenomenon—the impact of globalization on education, and because this study seeks to examine this phenomenon in various school settings, the multiple case study approach clearly serves the design needs of this study. As Stake (2006) explains, multiple case study research seeks to understand the qualities of a particular phenomenon, such as “teacher training in the European Union or home nursing care across the United States,” (p. 9). Particular to this study, the phenomenon in question consists of understanding the impact that globalization has on education as a strand that weaves its way from higher education pre-service teacher instruction classes to the middle school public education setting. In order to understand this phenomenon, this research study comprises two critical components: the higher education part and the public middle school part. Both components of this

study are described below and Appendix D provides a flow chart outlining the structure of this research study.

As discussed in the previous chapters, the influence of globalization at the macro level eventually manifests itself at the local level. In this case, the local outcome of globalization's influence consists of ramifications at both the higher education level—universities must adjust the pre-service instruction delivered to future teachers, and at the public school level—teachers who have received pre-service instruction must now implement 21st century instruction at the classroom level. The Global Vision Tomorrow Initiative is the commonality that integrates itself in all aspects of this study. First, the Initiative spurred on changes throughout the higher education system in response to the forces of globalization and to prepare students for success in the 21st century. Two, because of the particular reaction of the School of Education at THU to create the Internationalization Committee, which sought to integrate global preparation of pre-service teachers into university instruction, the Global Vision Initiative actually impacts K-12 public education instruction in the Crown City Schools. It is this phenomenon, a measure of instructional practices that threads throughout the higher education and public school entities, which serves as the focus of this research study. The phenomenon essentially equates to Stake's (2006) "quintain" or ". . . something that we want to understand more thoroughly, and we choose to study it through its cases, by means of a multicase study," (p. 21, 2006). The quintain thus represents the entity to be studied at multiple settings, which specifically is the impact of globalization on education at THU and two CCS middle schools as measured by assessing instructional practices.

Research Setting

Stake's quintain assessment accurately defines the multicase nature of this research study because this study consists of examining the qualities of a particular phenomenon in multiple settings. The phenomenon—globalization's impact on education—was studied at the higher education level and at the public middle school level. Additionally, at the middle school level, this phenomenon was examined at two schools. By examining this phenomenon in multiple settings and with multiple participants, rich data was gathered that revealed how globalization impacts education via the instructional practices of middle school teachers and the conceptualization of globalization by university professors. The research settings for this multiple case study encompassed the School of Education at Till Height University and two public middle schools within CCS. At the university setting, the phenomenon of globalization's impact on education was studied through the process of interviewing six professors about their conceptualization of globalization in the classroom and their specific efforts to prepare pre-service teachers to provide students with 21st century instructional skills as an outgrowth of *Global Vision Tomorrow*. Through analysis of classroom instruction at the higher education setting, the study examined the training received by pre-service teachers from THU School of Education professors as preparation for implementing global or 21st century instruction as middle school teachers.

The second setting of this study enabled the researcher to examine the impact of globalization on education through analysis of the characteristics of instructional practices of public middle school teachers. This component of the multicase quintain consisted of studying five teachers at two different middle schools. Each school and

teacher thus is an individual phenomenon; however all entities strongly connect to each other through endeavors to provide the students with 21st century learning content. Stake (2006) explains that this theme of commonality brings the cases together while as part of the research process each case should be examined individually. Ultimately, this research study connects the theme of globalization and education that threads throughout each case by hinging on an important point of unity: all participants either graduated from Till Height University or currently work at this university as professors.

The teachers (five in total) chosen for this study taught at middle schools within CCS—a city-county urban district. CCS is the public school district for Crown City, and while the schools of CCS are geographically located through the county, the district is considered an urban district. The most recent data indicates that 134,792 students attend school within CCS; of which, 41.2% are African-American; 32.8% are White; 16.5% are Hispanic; 4.9% are Asian; 4.5% are other; and 54.1% are Economically Disadvantaged (ED) (*CCS School progress report, 2010*). Four participants from this study taught at Jewel Middle School (pseudonym). Jewel Middle School is a traditional middle school with a total population of 1,213 students. The school demographics consist of 58% African American, 24.7% White, 9.2% Hispanic, 4% Asian, 4% Other, and 50.3% Economically Disadvantaged (*Jewel Middle School progress report, 2010*). Finally, the last participant taught at Monroe Middle School (pseudonym), which is a full International Baccalaureate school. The student demographics consist of 39.9% African-American, 31.5% White, 16.2% Hispanic, 7.6% Asian, 4.8% Other, and 46.7% ED (*Monroe Middle School progress report, 2010*).

The sampling process dictated that participants formerly attended THU School of Education from 2006 to the present and currently teach within CCS. As a result, while the selection of the participants occurred based on purposive and specific criteria, the researcher could not control characteristics of the schools at which these participants taught.

Sample Selection

Because this research study consisted of two components—the higher education analysis and the public middle school analysis—specific sample selection criteria was utilized, and this criteria was particular to each research setting. The use of purposive sampling is essential because it enables greater control over the data (Patton, 2002). The following sections outline the purposive sample selection criteria for both components: the higher education and the public middle school entities.

Higher Education Case Study

At the higher education level, the participants were professors who have also served on the Internationalization Committee or are affiliated with the concepts relevant to internationalization at Till Height University and thus possess a deep understanding of the expectations established in *Global Vision Tomorrow*. The Internationalization Committee at Till Height University was charged with the mission of implementing the mandates of the Global Vision Tomorrow Initiative. It is assumed that as part of this committee, professors can articulate the connection between globalization and education and can expound on their implementation of topics pertinent to globalization in their classrooms. Data collected from these participants informed aspects of the interview protocol utilized to interview teachers at the middle school level. This form of participant

selection was purposive in the sense that only specific professors who met specific criteria could participate in this component of the research study. A total of six professors were interviewed at the higher education level in order to collect a rich data set that clearly delineated the impact of globalization at the higher education level. Finally, the selection of professors from THU was critical because the School of Education at THU is the number one producer of teachers in CCS (Internal THU data); therefore, the study sought to investigate how teacher graduates from THU implemented 21st century instruction in the classrooms at CCS middle schools.

Middle School Case Study

The middle school component of this study consisted of interviewing and observing teachers who taught within CCS at a middle school setting, and participant sampling was purposive since participants were selected according to specific criteria. To begin, the participants must have attended Till Height University School of Education within the last six years—2006 to the present (2012). The reason for selecting participants from this time frame hinged on the fact that these participants would have taken education courses that integrated globalization into course offerings, which was a focus at Till Heights University due to the Internationalization Committee's efforts to implement the endeavors of the Global Vision Tomorrow Initiative. Thus this sampling allowed for the global thread to be consistently woven from the higher education level to the practical application of classroom instruction at the middle school level. Additionally, the reason for selecting middle school teachers rested on the importance that middle school plays in teaching critical 21st century learning skills. At the middle school level, the curriculum heavily emphasizes skills not just particular content knowledge. For

example, in language arts, the course offering combines reading, writing, and grammar, and the curriculum spirals throughout each grade level, building on the skills needed to train students in critical reading. Also, the course titles for the core academic classes taken by middle school students indicate the generality of the content; a typical student course load consists of science, math, language arts, and social studies. Each year in middle school, students take these same four courses, as well; however, it should be noted that the curriculum content is specific to each grade level. It is important that students have received a solid foundation in 21st century learning skills because at the high school level, the curriculum toggles back to an emphasis on content, not just skills.

Data Gathering

This study incorporated multiple forms of data collection, including interviews, classroom observations, and document analysis. These data collection methods aligned with the practices of qualitative research and guaranteed the collection of rich, descriptive information that would reveal the characteristics of instructional practices as they are influenced by globalization. Ensuring that the data collected reflects the reality of the phenomenon observed is an integral aspect of the data gathering process. In order to promote a level of data integrity, the research process relied upon triangulation and a strict interview and observation protocol. Triangulation at the higher education level comprised cross-checking the interviews with the syllabi of the professors who have been interviewed. By conducting a document analysis of the syllabi, the researcher could assess the form of global instruction occurring in the classroom as well as the frequency of global instruction. It is assumed that if a professor infuses instruction with global lessons, these global lessons should be evident in the syllabus. The 21st century skills

analysis rubric (See Appendix C) was utilized to evaluate each syllabus in order to determine the degree and presence of 21st century content. Interviews were conducted on site at the participant's school, either at the university for the higher education component or at the specific middle schools for the public education component. One interview per professor was conducted in conjunction with the syllabi analysis in order to triangulate the data

The interview process at the higher education level consisted of asking questions that sought to understand how the professors conceptualize globalization; instruct students in global lessons; and prepare pre-service teachers to address the demands of globalization as future teachers in the classroom. The interview process utilized a strict interview protocol (See Appendix A and Appendix B) and relied on one interview for each professor. At the public middle school level, the interview process again relied upon the use of a strict interview protocol to assess the level of global instruction infused into classroom instruction. Each middle school teacher participated in one interview. A caveat exists with the middle school interview protocol. By design the interview of the professors occurred prior to interviewing the middle school teachers so that information gleaned from the professor interviews could inform the interview protocol of the middle school teachers. Therefore, a component of the middle school interview protocol consisted of utilizing a semi-structured interview format in order to allow the participants to respond to concepts that emerged from the higher education interviews. All interviews were recorded on a digital recorder in conjunction with script taping the conversation as well. After completing the interview, the audio transcripts were transcribed into an electronic version in MS Word. This electronic transcript and audio version were stored

in a locked safe in order to ensure the security of the items and to maintain confidentiality as guaranteed to the participants.

A final method of data gathering at the middle school level consisted of participant observations of lessons designed by the participants that implement global instruction in the classroom. Five teachers were selected to participate in this study, which meant that five lesson observations were conducted—one observation per participant. The observations not only served as triangulation to the interviews but also provided insight into the delivery of 21st century instruction in the classroom. Essentially, the observation enabled the researcher to understand how teachers taught 21st century instruction and illustrated what 21st century instruction looks like in the classroom. The observation focused on the teacher's ability to implement a lesson that incorporated global instruction (i.e. 21st century learning skills). Additionally, the teachers were not provided with pre-observation guidance concerning the researcher's specific observation agenda. Instead, the focus and purpose of the interview was to complete the process of assessing the manner in which teachers conceptualize globalization instruction in their classrooms. Again, this study attempted to understand the impact of globalization on education, which at the middle school level consisted of studying the instructional practices of the teachers; therefore, the observations took place without indicating to the participants the preferred or desired research outcome. Finally, the participant observations utilized the script taping method, which is a process that entails writing the conversation in short hand as it occurs in the classroom. After the observation was conducted, the script tape transcription was cleaned up to eradicate grammatical errors and to piece together the conversation in the event that words or phrases may have been

left out. Throughout the observation process attention was paid to the infusion of 21st century instructional practices as a measure of globalization's influence on education.

Data Analysis and Coding

As previously discussed, the data sources for this research study consisted of interviews, observations, and document analysis of pertinent documents, including syllabi and THU documents. While it is clear that the interviews required coding in order to tease out relevant concepts, it was important to situate this process within a larger context. Given that the research in this study focused on the impact that globalization has on education, and given that measurement of this impact occurred within a 21st century framework, then it became necessary to explain how this 21st century framework applied to the treatment of the data. Due to the forces of globalization, the private industry influence on education results in an emphasis on 21st century skills at the public school level. Essentially, 21st century skills is a result of globalization, which means that measuring the impact of globalization on education dictates evaluating the effectiveness with which schools and teachers implement and utilize 21st century skills. 21st century skills stress the following educational instructional practices and outcomes: critical thinking, problem solving, integration of technology, and communication (Partnership for 21st Century Skills, 2011). The prevalence and relevance of these specific educational skills within key documents (i.e. *Global Vision Tomorrow*, Internationalization Committee, School of Education Handbook, and 2010-2015 Strategic Plan) and interviews thus informed the process of document analysis and interview transcript coding.

The coding procedure consisted of several critical steps. First, interview transcripts were transcribed to a digital medium in order to facilitate the coding process. Second, the researcher utilized ATLAS.ti to scour the data in search of underlying concepts and themes relevant to the overarching focus of this study—21st century skills. The critical themes include: globalization, 21st century instruction or skills, higher order thinking, engaged learning, authentic connections, and technology infusion. As Glesne (2006) explains:

Qualitative researchers use many techniques (such as coding, data displays, and computer programs) to help organize, classify, and find themes in their data, but they still must find ways to make connections that are ultimately meaningful to themselves and the reader. (p.165)

Third, codes according to these themes/concepts were categorized into a descriptive framework for analysis, and the developed themes were then associated to globalization and the components of the 21st century rubric. Finally, the analysis component relies upon using a 21st century rubric to determine the presence of 21st century instruction, if any, and the characteristics of this instruction as conceptualized by the participant in the interview. The 21st Century Analysis Rubric utilized for this process is in Appendix C. The coding of the public middle school data followed the same steps. Upon completing the participant observation, the data was transcribed into a digital medium in preparation for analysis. Once the initial coding of the classroom observation transcript was completed, the 21st century rubric was used to determine the depth and degree of 21st century instruction present in the classroom. Overall, this process was designed to tease

out relevant themes in order to assess and analyze the format, prevalence, and quality of 21st century instruction in the classroom.

The 21st century rubric utilized in this research study is an application of the H.E.A.T. Rubric (Moersch, 2011). H.E.A.T. is an acronym for higher order thinking, engaged learning, authentic connections, and technology infusion. The rubric was used to align the themes that emerged from the coding process to 21st century instruction. Also, participant observations were scored using the 21st century rubric. It should be noted that the rubric was slightly altered so that the observations could be quantified for comparative purposes. As a result, each component of the rubric was assigned a numerical value from 0 to 5, which represented the degree of presence of each 21st century skill in the classroom. After each observation, the observation script tape was analyzed and scored according to the rubric, and the results appear in Table 4: 21st Century Rubric Analysis Indicators.

The document analysis process consisted of examining critical documents for the following key terms: globalization, 21st century instruction or skills, higher order thinking, engaged learning, authentic connections, and technology infusion. After examining the documents for the critical terms, the emergent themes were categorized for analysis. The professor syllabi, School of Education Handbook, and 2010-2015 Strategic Plan were analyzed for critical terms using this method. Additionally, a comparative process allowed for the analysis of critical documents in comparison to each other. As an example, the *Global Vision Tomorrow* document was compared to the Internationalization Committee document with the process of scouring each document for the critical terms and alignment. The outcome of this document analysis process is found

in Table 1: Global Vision Tomorrow Initiative and Internationalization Committee Alignment Pattern.

Finally, in all cases the data were stored on a secure, password protected USB flash drive; and the flash drive was stored in a locked safe at times when not in use. All participants in this research study were given the opportunity to review the transcriptions gathered throughout the research process.

Phase I: Planning

The first phase of the research plan occurred during the months of August through November of 2012. During this phase, several key steps were taken. One, contact was made with participants at the university level and at the public middle school level. As stated previously, the researcher interviewed six university professors and five teachers at two different public middle schools. The contact consisted of sending out invitation letters soliciting participation in this study. Additionally, in phase I, the researcher completed and submitted the IRB to the university and to the public school system.

Phase II: Data Collection

In phase II, the researcher conducted site based research during December, 2012 through March, 2013. The first action of phase II consisted of interviewing the six professors at the college of education who met the selection sample criteria previously outlined. The interviews were coded and analyzed for relevant themes. The reason for interviewing the professors first stemmed from a demand that information gathered from this interview then infuse the interview protocol to be utilized at the middle school level. Since this study examines the thread that weaves from the university level down to the public school level, it is important to capture information at the university level in order

to examine how these instructional practices manifest themselves at the public school level through a semi-structured interview process. Additionally, phase II utilized document analysis and classroom observation as a means of data gathering. Public middle school teachers were interviewed and observed in this phase. Once the interviews were complete, they were transcribed and prepared for coding and thematic analysis.

Phase III: Follow-up

Phase III occurred during February and March, 2013. This phase consisted of analyzing the data and writing the final two dissertation chapters. The data analysis process required the use of a 21st century learning skills rubric to examine the quality and degree of global instruction taking place in the class. The phase III process of analyzing the data presented a critical moment in this research because this process revealed the level of global instruction present in the classroom and the degree to which global instruction does occur.

Limitations

Due to the characteristics of the methodology utilized in this research study, specifically case study research, certain limitations inherently exist and therefore deserve bracketing in order to strengthen this study overall. To begin, as Yin (2009) explains, a misconception among researchers is that the case study methodology should be used as merely the exploratory phase in part of a larger research process that culminates with an experimental aspect. Yet, whether this misconception holds true or not, in order to answer the research questions particular to this research, the case study methodology most appropriately provides the means by which to uncover the details of instructional practices as a measure of the forces of globalization. Additionally, because it appears that

current research is limited in this area, the case study methodology best serves as the process to collect relevant, timely, and accurate data about instructional practices in the classroom. After all, the case study method, because of its process of observation, document analysis, and triangulation, ensures the collection of rich data.

It is difficult to measure critical thinking since researchers cannot get into the mind of the student in order to determine if critical thinking is actually occurring or the degree of critical thinking taking place in spite of the quality of classroom instruction observed. Since an important component of this research consists of assessing the presence of critical thinking, which is a 21st century learning skill, this particular challenge must be acknowledged and accommodated in order to produce valid results. One way to adjust for this challenge that the researcher utilized was to examine the presence of critical thinking instructional opportunities present in the lesson design and in the lesson delivery. The classroom observation served as an opportunity to assess whether or not critical thinking opportunities were present in the lesson, and the classroom observation allowed for a means of measuring the quality of the critical thinking opportunities presented to the students. Additionally, the critical thinking analysis protocol provided the tools needed to adequately assess the presence of critical thinking in each individual case that made up the whole quintain.

Perhaps the greatest limitation to this study relates to the underlying research question which attempted to study the impact of globalization on education and through this process discern the nature of instructional practices that result from the impact of globalization on education. Within this framework a critical question arose: what if the instructional practices observed did not reveal an impact of globalization on education?

What if the professors at THU have not sufficiently prepared pre-service teachers to teach in a globalized context? While a real possibility existed that this outcome could emerge, it seems that this outcome would perhaps yield equally interesting results for discussion as well. After all, the pressure on public middle school teachers is great to utilize instructional practices that incorporate higher order thinking, communication, authentic learning, engaged learning, and technology integration. How would a teacher justify lesson design and classroom instruction that does not incorporate these instructional practices? It was critical to anticipate these questions in order to ensure that the process utilized in this research study made every attempt to override the possibility of a research study that produced no tangible or measurable outcomes.

Basic Assumptions

Globalization as a process pressures nations to respond to macro forces in order to compete economically. Through the pressure of competition, nations become adherents of neoliberal economic policies, policies that dictate the deregulation of private industry and the privatization of public entities (i.e. public schools) where possible. These neoliberal policies also emphasize the standardization of public schools and the importance of utilizing education as a tool for gaining employment rather than seeking deeper understanding of content areas and attaining personal fulfillment through the pursuit of knowledge. This analytical framework shapes the foundation of this research study. Essentially, it is assumed that because of the global pressure, which serves as a vehicle for the implementation of neoliberal policies, schools have responded by implementing instructional practices that prepare students for the current economic circumstances as dictated by private industry. As a result, researchers should be able to

study the effect of these policies—policies that stem from the process of globalization in action in the classroom. In the case of this particular research study, this assumption was integral since the university, which was a significant component of this research, serves as a cog in the wheel of preparing teachers to teach 21st century skills. Ultimately, the thread that weaves throughout this research study, instructional practices and the university connection, emerge in a global context that relies upon the implementation of neoliberal policies, and researchers should be able to observe and measure the degree and characteristics of this influence.

Summary

Applying the multiple case study methodology, a qualitative research technique, the researcher examined the phenomenon of globalization and its impact on education. The research relied on interviewing professors at the higher education level in order to assess the level of preparation and exposure to the topic of globalization they have delivered to pre-service teachers. Teachers who have taken classes at the university, graduated within the last six years, and who are now currently teaching in a CCS middle school were interviewed and observed in order to determine how well they have incorporated global instruction into their classrooms. The data analysis process allowed the researcher to discern relevant themes and to understand how these themes connected to the qualities of globalization and 21st century learning skills. Findings were analyzed in relation to the participant group and were discussed in the upcoming chapters.

The findings from this study benefit educators and policy makers because they present a detailed description of effective 21st century instructional practices in the classroom. With the implementation of macro level policies dictating a need for 21st

century instruction in the classroom, this study illustrated the details of 21st century instruction as implemented by teachers. How do teachers conceptualize 21st century instruction and implement such instruction in the classroom? Answering these questions allows educators to further implement effective curriculum design and to ensure the fidelity of 21st century instructional practices in comparison to state and federal guidelines. Finally, through the results of this research, higher education institutions can gain insight into 21st century instructional practices and the role of the university in preparing pre-service teachers to implement 21st century instruction in the classroom. Essentially, the outcome of this research serves as a check and balance to measure the effectiveness of higher education teacher pre-service instruction.

CHAPTER IV: FINDINGS

Chapter one outlined the foundation of the research problem and established the research questions that guide this study. The research attempted to answer two important questions: Based on the vision of the Global Vision Tomorrow Initiative, how has the Till Height University's (THU) School of Education (pseudonym) prepared pre-service teachers to provide public education students with a 21st century education? And two, how do THU graduates effectively deliver global instruction as defined by teaching 21st century skills? As the research questions suggest, this study consists of two components: a higher education analysis of global instruction preparation for pre-service teachers, and a public middle school evaluation of the effectiveness of middle school teachers at delivering 21st century instruction in the classroom. In order to study this dual phenomenon, a framework established in chapter one illustrated the connection between globalization and its impact on education at the classroom level as defined by the delivery of 21st century skills. Essentially, 21st century skills also referenced as 21st century instruction occurs as an outcome of globalization's influence on public education. Chapter two delved into current globalization and education literature in order to establish a logical, research based framework needed to answer the research questions. Additionally, chapter two established a theoretical foundation through which to analyze the findings of this study. In chapter three, a research methodology was constructed for

the purpose of studying both the higher education component and the public middle school component of the research questions.

Chapter four describes the findings of this two part study: higher education research setting and public middle school setting. The chapter begins with the higher education component, establishing a framework of analysis. The chapter then transitions into the public middle school component, in which public middle school data is analyzed in isolation and then analyzed for alignment to the higher education data. Through the process of coding and document analysis, important themes emerged from the transcripts. In the higher education research component, the data indicated that THU did respond to *Global Vision Tomorrow* through the creation of the Internationalization Committee. The response on the part of THU illustrates the impact of globalization on education at the higher education level. Furthermore, it appears that the professor participants possess knowledge of important education and globalization concepts, including globalization and 21st century skills. However, from the research, evidence suggests an inconsistency among the professors when analyzing their definitions of the key concepts. The data analysis suggests that the professors incorporate 21st century instruction in their classrooms; yet, the incorporation of 21st century instruction is diffused because each individual possesses a varied interpretation of this skill. Thus, 21st century skills emerge in the professor's instruction, but the 21st century skills are not aligned among each professor. From the data analysis of the public middle school teachers, the theme of inconsistency persists. The public middle school teachers clearly articulated an understanding of the concept of 21st century skills, yet in depth definitions and implementation of 21st century instruction appears to lack alignment among the research

participants. Finally, the implementation of 21st century instruction at the public middle school setting is further discussed in order to directly respond to the second research question.

Part I: Higher Education Findings

The primary focus of the higher education research emphasizes the need for a qualitative attempt to assess the school of education's response to *Global Vision Tomorrow*, an initiative promoting the global preparation of students. Specifically, *Global Vision Tomorrow* promoted global readiness, meaning, "Global Vision should educate its students to be personally and professionally successful in the 21st century and, to do so, should enhance the global competitiveness of its institutions and their graduates," (University General Administration, 2007, p. 2). Also, *Global Vision Tomorrow* promoted strengthening the pool of teachers and school leaders through the higher education system, state board of education, and the community college system. Essentially, *Global Vision Tomorrow* illustrates an example of the state's desire to strengthen the public schools by improving instruction of and preparation for pre-service teachers at the higher education level.

In response to *Global Vision Tomorrow*, one outcome implemented by THU consisted of the formulation of the Internationalization Committee. The Committee established as its mission the following statement: "The Internationalization Committee will advise and influence curricular and teaching practices that promote global consciousness for faculty, staff, and students," (*Internationalization committee globalization goals 2010-2015*, 2010, p. 1). Furthermore, the Internationalization Committee produced a steering document titled *Globalization Goals 2010-2015*, which

outlined four specific goals, objectives, and expectations. The goals are as follows: Goal I Promote global awareness through teaching and the curriculum; Goal II Broaden the College of Education's influence in international education; Goal III Promote international research, service and grant opportunities; and Goal IV Expand and diversify local, regional, and overseas opportunities for faculty and students (*Internationalization committee globalization goals 2010-2015*, 2010).

The higher education research question in this study asks: based on the vision of the *Global Vision Tomorrow* Initiative, how has the Till Height University's (THU) School of Education (pseudonym) prepared pre-service teachers to provide public education students with a 21st century education? In order to adequately respond to this question, a linkage between *Global Vision Tomorrow* and THU's response to this initiative must clearly delineate an actionable outcome on the part of the university. Essentially, in conjunction with the recommendations of *Global Vision Tomorrow* emerged the Internationalization Committee at THU. The Internationalization Committee established guidelines for the THU School of Education to follow in an effort to prepare future 21st century educators. The research study requires the formulation of this linkage between *Global Vision Tomorrow* and the Internationalization Committee so that a clear analysis of the transcripts from the higher education participants will demonstrate either alignment or misalignment with THU's educational goals.

Table 1: Global Vision Tomorrow Initiative and Internationalization Committee alignment pattern

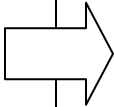
Global Vision Tomorrow Finding	 Alignment to Internationalization Committee Objective	Thematic Overview
<p>4.1.1 Global Vision should prepare its students for successful professional and personal lives in the 21st century, equipping them with the tools they will need to adapt to the ever changing world.</p> <p>4.1.2: Global Vision programs, especially research programs, should be globally competitive to ensure that they are globally relevant and significant.</p> <p>4.3.3: Global Vision should strengthen efforts, in cooperation with the State Board of Community colleges and the Community college System, the State Board of Education, and the Department of Public Instruction, to enhance the teaching skills of public school faculty and the leadership skills of public school administrators.</p>	<p>Goal I Objective I: To promote the preparation of undergraduate and graduate students to be more conscious of global issues, involved in global discourse and to be globally reflective.</p>	<p>Globalization as Competitiveness</p>

Table 1 Continued

<p>4.1.3: Global Vision should promote increased partnerships between its own campuses and international universities and enhance the global awareness of its faculty and students.</p>	<p>Goal I Objective III: To promote the preparation of faculty, staff, and the curriculum to be more inclusive of global concepts and the impact of internationalization on educational professionals, research, and service.</p> <p>Goal II Objective I: Promote the establishment and sustaining of academic partnerships with international institutions.</p> <p>Goal III Objective III: Promote awareness, interest and production of international research.</p> <p>Goal IV Objective I: Promote partnership with the University Office of Internationalization Program [OIP] to provide advice and information for international experiences in education.</p>	<p>Globalization as Cultural/ International Experience</p>
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The findings from Table 1 demonstrate alignment between *Global Vision Tomorrow* and the Internationalization Committee goals in several specific objectives. However, differences in tone exist between the two documents, thus suggesting bifurcated purposes. For example, *Global Vision Tomorrow* frequently references the importance of “Global Competitiveness.” Yet within the Internationalization Committee document, the reference to “Competitive Global Citizens,” is further explained as an effort to create students who are “Consciously aware of the global and local

interconnectedness in our everyday lives, Understanding their social responsibility to get involved in critical global issues, and Becoming a cultural ambassador in their local community or environment,” (*Internationalization committee globalization goals 2010-2015*, 2010). The Internationalization Committee document suggests a critical theory purpose aligned with promoting conscientized, reflective students. Because the research question seeks to understand the influence of globalization at the classroom level within the School of Education, it then becomes necessary to analyze the professor participant responses to assess the level of influence of globalization at the classroom level. The alignment between *Global Vision Tomorrow* and the Internationalization Committee document demonstrates the emergence of two primary themes: Globalization as Competitiveness and Globalization as Cultural/International Experience.

The delineation between these two documents then provides the essential framework to analyze the professor participant responses. In order to assess the alignment between *Global Vision Tomorrow*, the Internationalization Committee, and the faculty within the THU School of Education, it is important to categorize the professor responses within a structure that measures their responses against a predetermined construct that either demonstrates a hierarchical linkage or fails to demonstrate this linkage. Therefore, part one of the higher education analysis consists of analyzing the professor interview responses in relation to the goals set forth by *Global Vision Tomorrow* and the Internationalization Committee. Part two of the higher education analysis consists of analyzing the emergent themes relevant to globalization and education that surfaced throughout the professor participant interviews.

Participant Profile

The participants in the higher education component of this study all reside within the School of Education at Till Height University (THU). THU is part of the state university system and defines itself as an “. . .urban research institution,” located in Crown City. According to the THU Strategic Plan 2010-2015,

THU, “. . . recommended 624 new teachers for the state teaching license, the 2nd highest number among the state’s 47 colleges and universities. In teaching fields of highest need – mathematics, science, special education, and middle grades education – [THU] ranked first, second or third in the production of new teachers in these fields. (*College of education strategic plan, 2010-2015*, 2010, p. 3)

THU is the 4th largest state institution of higher education, and it is the largest university within the Crown City region. The university offers 19 doctoral programs, 64 master’s degree programs, and 86 bachelor’s degrees. Additionally, more than 900 faculty members work at THU, and the university student population currently exceeds 25,000 students. Six THU professors and/or instructors from the School of Education participated in this study, and each individual shares a common thread: internationalization. For the sake of anonymity, the professors are named as follows: Professor Ethan, Professor Julian, Professor Iria, Professor Declan, Professor Lola, and Instructor Margot. Table 2 provides a data snapshot of each participant.

Table 2: Participant snapshot

Name	Gender	Course(s) Taught
Professor Ethan	Male	Adolescent Learner Diverse Learner Curriculum Studies Science Education Urban Education
Professor Julian	Male	Globalization, Communities, and Schools Teacher Leadership Second Language Acquisition K-12 Schools
Professor Iria	Female	Instructional Design and the Use of Technology with Elementary School Learners Introduction to Curriculum for Elementary School Learners Measuring and Evaluating Learning in the Elementary Curriculum
Professor Declan	Male	School Law Curriculum Leadership Instructional Supervision Organizational Theory
Professor Lola	Female	Classroom Management Content Area Instruction Doctoral Seminar in Diversity and Collaboration General Seminar in Collaboration
Instructor Margot	Female	Student Teaching Seminar

Professor Ethan is currently a faculty member within the Department of Middle, Secondary and K-12 Education (MDSK). Professor Ethan teaches graduate and undergraduate courses, including Diverse Learners and science methods classes. Professor Ethan, an international faculty member, prides himself on this international component and naturally incorporates an international perspective in his classroom instruction. Professor Ethan was a founding member of THU's School of Education Internationalization Committee. Field note observations reveal that Professor Ethan's office is filled with international books and books with a globalization orientation, including textbooks written by the professor himself.

Professor Julian is also a member of the MDSK department and an international faculty member. His course offerings focus on teacher leadership for students majoring in Teaching English as a Second Language (TESOL) and a globalization course which is offered to TESOL and MDSK students. Professor Julian primarily teaches graduate students. Finally, Professor Julian participated in the Internationalization Committee as well.

Professor Iria's affiliation within the College of Education is with the Department of Reading and Elementary Education (REEL). Professor Iria teaches primarily undergraduate students; however she has taught at the graduate level in the past but prefers undergraduate courses. Professor Iria's course offerings include a senior level curriculum and assessment course and an introductory course focused on instructional design and lesson planning. Professor Iria also worked on the Internationalization Committee. Finally, unlike Professors Ethan and Julian, Professor Iria is not an

international faculty member; in fact, prior to joining THU, Professor Iria lived in South Carolina.

Professor Declan serves the School of Education as a member of the Department of Educational Leadership. Prior to joining the faculty at THU, Professor Declan worked as a high school principal and superintendent. The interview responses provided by Professor Declan clearly demonstrated a leadership perspective that must be acknowledged in the process of analyzing Professor Declan's data. While Professor Declan has not participated directly on the Internationalization Committee, he is affiliated with internationalization through his endeavors to work with THU's sister school in Germany. Finally, Professor Declan teaches graduate courses, including School Law, Curriculum Leadership, Instructional Supervision, and Organizational Theory.

Currently, Professor Lola teaches and conducts research for the Special Education department at THU. Professor Lola's focus within THU emphasizes diversity and diversity training. While Professor Lola has not participated in the Internationalization Committee, her background in the area of diversity demonstrates an awareness of the concepts and ideals relevant to the Internationalization Committee, including enhancing the background knowledge of students for a diverse and global community. Professor Lola teaches several courses including content courses and classroom management courses.

Instructor Margot offers a unique perspective to this research study. Currently, Instructor Margot works in the Office of Field Experience, which is the student teaching coordinating office for student teachers at THU. While Instructor Margot is not a professor since she does not hold a PhD, she teaches a supervisory course for student

teachers. Thus, Instructor Margot's direct contact with student teachers enables her to offer insightful answers that perhaps cross the bridge in this study between the higher education setting and the public middle schools. The course taught by Instructor Margot is Student Teaching Seminar.

Globalization as Competiveness Theme

The alignment between *Global Vision Tomorrow*, which represents a state directed response to the pressures of globalization, and Goal I Objective I Expectation I, exists through a shared desire to produce students who possess “. . . global competitiveness,” (University General Administration, 2007) the state term, and students who are “Competitive Global Citizens,” (*Internationalization committee globalization goals 2010-2015*, 2010)—the School of Education term. While the wording between the two documents illustrates a similar response to the forces of globalization from both the state and the School of Education, further analysis of the expectations as outlined in the Internationalization Committee document demonstrate a broader view of globalization beyond just competitiveness. Moreover, analysis of the professor participant responses is essential to determine the extent to which globalization trickles down to the classroom and thus to the School of Education students. The professor responses varied with regard to their assessment of globalization and its role in producing globally competitive students, and more importantly, the professors applied a critically conscious awareness to their definition of globalization. While one professor did speak of globalization in terms of competitiveness, this professor also couched his answer within a larger framework of awareness and collaboration, not just competition.

The response to the following question *how do you conceptualize globalization?* illustrates the deeper understanding of globalization as described by the professors. Professor Ethan's initial response leans on Globalization as Competiveness theme as he initially provides an answer that discusses the competition that emerges due to globalization. He states,

The idea that you are going to have to function in a marketplace where there is competition at a global level. So your competition is not going to come from your neighbor in Huntersville or Gaston County. Your competition is going to come from China or India. And so I think that consciousness was fairly well at least well reflected and to a level consciously infused. But Of course to go back to the concept of globalization it is the notion that the world has become very little. We're now living in a global village where you can shuttle across continents in hours as opposed to days.

However, further clarifying answers suggest that Professor Ethan is perhaps somewhat pragmatic, and that while he recognizes the existence of global competition, this concept does not align with his ideals. Professor Ethan's response to the question *do you see a connection between globalization and internationalization?* illustrates the broader vision this professor has of globalization. Professor Ethan states,

When you think about the globe I think we are thinking about unity. I never really had time to really intellectually dissect the point. But I think when you think about globalization we are thinking about the globe as an entity. And the globe. When we think about internationals we are thinking

about nations. Inter nations literally. Between nations. And I think the notion of internationalization I think that's part of it I wouldn't like per se even though at the generic level I can say that OK I'm international and I do say that I'm international guy and we use that word perfunctorily but I think that when you are thinking about it philosophically it connotes that there are different nations at war which is I guess reality different nations in competition you know. When you go into space you see this one little ball blue ball which I think of more as the globe. So if I could make a distinction between the two globalization is a better word if we operationally define it to mean that there is unity in the globe. And internationalization could connote that we are international entities which are fighting for some limited resources. So this operational definition and I haven't read it anywhere but that's what I would say to that.

Professor Julian conceptualizes globalization in terms of the proximity produced by technology that ultimately results in a flattened world. Professor Julian explains,

Well, I don't take a real critical perspective on it. Suarez-Orozco thinks of globalization as a piece of a long-standing component of human history. The Phoenicians experienced globalization or the Chinese did, so he doesn't see it as part of 21st century. I see it in that way, too, that this is a part of the human condition, migration.

However, what may be more specific today is communication and media.

We can be watching – for example, yesterday there was that big explosion

at that big state gas plant in Mexico, so you're watching it live. A lot of it, we can do live or electronically.

We know what's happening around the world at our fingertips, and we can also travel so much more easily. It's no big deal to call somebody anymore, or you're not waiting at the mailbox for the letter to come.

Because we can email and we have the World Wide Web and we can call, and because we can travel so much more easily, that I think there's maybe more of a possibility for people to participate in those migrations virtually, maybe, but I'm not a preservationist, like we want to keep different communities intact and that these global currents are threatening communities.

I see that as part of human condition, that there's always those shifts in migration and trade, but maybe what's more particular today is the immediacy of it, for people that might not have been as aware of those things. Maybe, I don't know. That's how I see it.

Yet further clarifying answers suggest that Professor Julian understands that because of this natural outgrowth of the human condition, it his role as an education professor to enhance the empathic understanding of his students for different cultures and cultural circumstances.

You know, I've been on that internationalization committee. That course specifically is addressing – it's specific to [the state] context, and it's looking at globalization and its manifestations in K-12 communities in a

[local] context, specifically focusing on the experiences of transnational Latino students.

In that specific course – and I'm not saying all my courses, because all my work is about Latinos and education – I'm really focusing on Latinos in [the state] schools, or at a national level. For example, in that course, it's basically a book club, so we read books that are about Latino immigrant children, and a lot of them have a connection to [the state], so we read Enrique's Journey. He ends up in [the state].

Home on the Field, that's Paul Cuadros's book about that soccer team out in Siler City. Hanna Guild, who was a [THU] professor in human geography, wrote a book about the Latino migration experience in [the state]. It's about the experience here in [the state]. We did another, we watched a movie – that wasn't specific to [the state]. It's called Which Way Home. It's a documentary about kids.

We read Suarez-Orozco's Children of Immigration, and we ended the course this semester, reading – Guadalupe Valdez wrote a book about young bilingual interpreters and making the case for changing the definition of giftedness, basically saying, look, these kids can do a lot of things.

The focus, what I do is we're looking at Latino immigration specifically in [local] schools and communities and trying to develop more of a dialogue and a disposition, empathy, just having them develop empathy as educators, about the complexity of immigration and the experiences of

children in their classrooms, the potential experience of children in the classroom and then in the communities.

For Professor Julian, while globalization is part of a natural process, his conceptualization of globalization appears to ignore any sense of global competition and instead hinges on the importance of empathy as evidenced in the course structure and material utilized in his classes. Essentially, students must possess an understanding of individuals and the experiences that define their world view.

The response to this question by Professor Iria suggests that globalization equates to cultural awareness, and within the response there exists no influence or acknowledgement of globalization as competition. Professor Iria states,

That's a big question. I think there's several facets to it. One is just being a global citizen. This is something you might be interested in, too, and I'll share it, because I'm thinking about this, because I've just looked at that.

This is from the organization for study abroad, International Offices.

This is a survey that my students who are going on the study abroad have filled out, and it talks a lot in here about being a global citizen, exploring the global context and what does it mean. One student put in one of her answers that just being aware of the environment, being a good citizen and recycling and those kinds of things.

It's also being able to communicate cross-culturally, knowing that there are cultural differences in people and communication styles are different and that kind of thing. It's also how students learn, students from other cultures attack learning in different ways than our students.

I think especially for our teachers, all those aspects of global citizenship, global awareness that really apply to what's going on in your classroom, because our classes are so diverse these days, especially in the Charlotte area, that those are things that they need to know.

For Professor Iria, globalization equates to an awareness of the diversity of cultures and experiences present in the classroom for teachers within large, diverse cities.

Professor Declan provides a succinct definition of globalization, which is perhaps grounded in a critical analysis that views globalization as a force of interconnection.

Professor Declan states, “I think it is the movement built on communication and technology, toward understanding that all countries are at some point, some more, some less, interconnected with every other country, that we don't exist in isolation.” The important words from this definition include “interconnection” and “don't exist in isolation.”

Professor Lola's definition of globalization incorporated her diversity perspective. Professor Lola defined globalization as follows: “I think it's having a respect for other cultures. You have to learn about those other cultures, to have a respect for those other cultures.”

Finally, Instructor Margot also provided a succinct answer, but it should be noted that Instructor Margot's definition of globalization incorporated “21st century” into the response. Instructor Margot explained, “I just think of globalization as being aware of global issues, using 21st century skills to try to understand and address those global issues that affect diverse cultures.”

The professor participant responses suggest that globalization infuses the conceptual framework that ultimately surfaces in their classroom instruction. Additionally, the responses indicate a thoughtful reflection on the definition of globalization, illustrating an awareness of the larger instructional significance of globalization within the classroom. However, in contrast to *Global Vision Tomorrow's* specific focus on global competitiveness, the participant responses portray a greater need for inclusiveness and cultural understanding as a means of producing students who can successfully navigate in a complex world.

Globalization as Cultural/International Experience Theme

Globalization as a cultural/international experience theme portrays actionable oriented outcomes that include the utilization of international travel and partnerships as a means of enhancing one's global experience. In particular, this theme hinges on a notion that globalization involves or should involve travel and partnerships to enhance an individual's global awareness. Analysis of *Global Vision Tomorrow* and the Internationalization Committee document reveal alignment between the state and the School of Education as evidenced in Table 1. Globalization as a macro force thus produces state level policies that lead to outcomes at the college level; in this case the outcomes include an emphasis on opportunity for travel and experiences that broaden one's perspective on the world. Analysis of the professor participant responses also reveals a strong correlation between globalization and the importance of travel or the possibility of interacting with individuals from diverse backgrounds as a way of breaking down barriers and building global awareness.

While Professor Ethan does not address travel specifically as an important aspect of achieving global awareness, he does suggest the importance of breaking down cultural barriers in order to become globally aware. The following response supports this point.

Actually from day one you get it as soon as I open my mouth. You can't escape the notion that your international professor is not different on two levels. Because my students will see me as the black guy. When I open my mouth they will say OK he's not quite the accent I know so where are you from. But you know I intentionally and actively widen their scope I let them know and challenge their notions of what their perceptive realities are. Globalization the person who is well versed in knowledge knows enough to say that the Canaan the scopes of knowledge are wider than what we can teach from our lifetime. But I think that most professors who are international I think are oriented they are disposed to teaching their students with some personal stories and such. In my case because of the courses I have opted to teach you would not complete my course without being fairly well versed in globalization issues. Actually you can see that [a professor] and I we wrote a book Global Issues and Education, that's one of our books. I wrote this old book What Happens When Students Are in the Minority? But this book is actually a cross cultural piece which exposes different ideas. The notion of difference. And teaching diverse learners is really a very international book because we talk about more or less a brief history of the world. That's what the book is.

The suggestion in this case points to an important outcome—future teachers must possess backgrounds that allow them to view students from differing perspectives. In order to achieve this self-actualization, pre-service teachers must first diversify their own personal experiences and understandings.

In fact, both Professor Julian and Iria address the importance of study abroad as an experience that can enhance a student's personal background and thus produce a more effective educator. Professor Iria explains, "I guess, in the study abroad, is really to learn about German education, do some comparative ed type of things. The other part of this is also learning the inter-cultural competence and how we can apply it to the classroom."

While Professor Iria will lead a class on a study-abroad experience in order to build cultural competence for the students, Professor Julian shares a similar yet conflicted view regarding travel. To begin, because of Professor Julian's Central and South American roots, he laments that travel to these countries is perhaps too dangerous for his students. Professor Julian states,

That's more what I see as the challenge, is developing interests in the world around them, outside of [the state], and taking that big risk. That's where I do think that study abroad actually is a big piece of it for them, because that might be the first time they ever leave the country.

It's a whole experience of cultural displacement, and the teachers I've known that have done that really have loved it. Now, part of the issue is we can't do that anymore in Mexico. They're travel banned. Because of safety concerns, we're not arranging exchanges with Mexico, but then there's similar issues, let's say, in Peru.

I'd love to take them to Peru, but then it's dangerous in Lima, and I don't want a bunch of drunk teachers getting mugged and hijacked, you know what I mean? Or, they go out to the discotheque and, "I'm going to go and collect the body."

These are the things I'm really struggling with. I'd like to take them to study abroad, but I can't think of anywhere except maybe Costa Rica now, where you could take them, that's not too far away, but then what's the point of going to Spain?

Do you see what I mean? From my point of view, I'd want to take them to South America, Central America, but Costa Rica? It would make more sense like Mexico, Guatemala, Honduras, but to me, it creates a stress.

However, Professor Julian also acknowledges that the School of Education supports the travel endeavors of the professors, perhaps to enhance the global awareness to the faculty and thus create a sense of cultural awareness among the professors. Professor Julian states,

But at the same time, I think that is being pushed and let's say encouraged, for example. The faculty travel grants that the dean has given out for the last five years or something, so every year she's given out \$20,000 worth of money for faculty to present outside the United States, or do a project outside of the United States.

The analysis indicates that a connection exists between *Global Vision Tomorrow* and the goals of the Internationalization Committee. Primarily, the shared endeavor to promote global awareness through international travel and research opportunities.

21st Century Instruction

The second half of the higher education research question for this study delves into the ability of the THU School of Education to prepare pre-service teachers to provide 21st century instruction in the classroom. The public middle school component of this study will assess the effectiveness of the teachers to teach 21st century skills; however, the higher education part of this study sets out to evaluate the existence of whether or not space has been created to prepare pre-service teachers to provide 21st century instruction. A close examination of *Global Vision Tomorrow* indicates an awareness of 21st century goals. In fact, the purpose of *Global Vision Tomorrow* is clearly stated:

The outcomes of this Initiative will guide and shape current and future priorities, resource allocations, existing and future programs, and strategic plans and missions of the University System, its 17 constituent institutions and its affiliated entities to ensure that [the higher education system] not only becomes more proactive and responsive to the needs of our state, but remains so in the years to come as the people of [the state] continue to confront the myriad challenges of the rapidly changing, knowledge-based global economy and environment of the 21st century. (University General Administration, 2007)

The question naturally arises, how does this goal surface within the School of Education at THU? Thus the research question: how has the Till Height University's (THU) School of Education (pseudonym) prepared pre-service teachers to provide public education students with a 21st century education? For this study, 21st century skills were defined as "soft" skills deemed necessary to succeed in private industry and include higher order

thinking (i.e. critical thinking and problem solving), communication, authentic learning, engaged learning, collaboration, and technology integration. 21st century skills evolved from the emergence of the knowledge economy, which, in an effort to develop human capital, placed greater emphasis on soft skills over brute skills.

Coding and thematic analysis of the professor participant responses illustrate the presence of similar and varied knowledge of 21st century skills. The coding process utilized a structured approach. First, interview transcripts were transcribed to a digital medium. Second, the qualitative computer program ATLAS.ti allowed the researcher to scour the data in search of underlying concepts and themes relevant to the overarching focus of this study—21st century skills. The critical themes include: globalization, 21st century instruction or skills, higher order thinking, engaged learning, authentic connections, and technology infusion. Third, codes were categorized into a descriptive framework for analysis according to these themes/concepts, and the developed themes were then associated to globalization and the components of the 21st century rubric. Finally, the analysis component relies upon using a 21st century rubric to determine the presence of 21st century instruction, if any, and the characteristics of this instruction as conceptualized by the participant in the interview. Table 3 provides examples of the primary 21st century themes present within the study, supporting quotes as evidence of these themes, and alignment to the 21st Century Skills. Finally, table 3 demonstrates similarities in responses among the participants when asked to define 21st century skills.

Table 3: 21st century skills emergent themes

Emergent 21st Century Theme	Supporting Quotes	Alignment
Collaboration	<p>I think 21st century skills are collaboration skills. They are teamwork skills, they are working together, not always in terms of using technology, and not always face to face, sometimes virtually.</p> <p>When I think of 21st century skills, this is the kind of thing that I'm thinking about, using collaboration. Again, what would be 20th century skills in both learning and teaching are the skills that our profession has typically been built on.</p>	<p>Authentic Learning:</p> <p>21st century instruction incorporates authentic learning, which includes real world experience such as collaboration.</p>
Technology	<p>Something that we've needed for a while. I got a master's in instructional technology, so I've been working with technology for years, and when I first came here, students actually had a technology portfolio we had to check stuff off of. Then when the new teacher standards came in, those evidences came in, things changed and we dropped that, because theoretically, technology should be infused in everything we do.</p> <p>That is happening now, as some professors have</p>	<p>Technology:</p> <p>21st century instruction infuses technology into lesson design and implementation.</p>

Table 3 Continued

	retired and we've gotten some younger people in here. I'm just telling you the truth. We've found that there's more technology being infused into our courses, and so I think the first few times, I really looked at the 21st century skills.	
Higher Level Thinking	<p>What does 21st century skills mean? I think it means the same thing that we were saying many, many years ago, that our kids need to be able to think and to function at higher levels of thinking and functioning. In its simplest terms, 21st century skills are on the high end of Bloom's Taxonomy, not on the knowledge and comprehension in Bloom's Taxonomy.</p> <p>That's a good question. If I am teaching them to use 21st century skills themselves, then I've got to teach them – and the word I said was “used,” which is the application level of Bloom's Taxonomy. I've got to have them functioning on the higher levels of Bloom's Taxonomy.</p>	<p>Higher Order Thinking:</p> <p>21st century instruction infuses opportunities for critical thinking or higher level thinking.</p>

While the results in Table 3 illustrate that the participants understood 21st century skills because some of the responses align to the commonly accepted definitions of 21st

century skills and several responses share similarities, in general, the participant responses demonstrate a trend towards inconsistency. When asked the question: *How do you conceptualize 21st century skills?* each participant provided a varied answer that related tangentially to the concept of 21st century skills yet demonstrated individuality in thought and interpretation to the exact definition of 21st century skills. Consider each participant response outlined below.

Professor Ethan's definition of 21st century skills:

That's actually the cousin to the notion of globalization. I think that that's really what the governing bodies think. We are living in the 21st century. And what does that mean? How do they define that? They define it operationally as a world where we are interconnected. A world where we have the skills to compete. And I think the notion of competition really comes in. Because when you read the document actually the [state] document it says fairly plainly we want to produce students products graduates who are functional and competitive. That language. And so it's interesting that you know the notion of competition is in there and not necessarily cooperativity.

So again of course that is the...their assignment is to make the state competitive because that what falls within the institution. But I think because of that consciousness then we actually we are circumscribed. The work is involved in the 21st century skills becomes circumscribed by competition. I don't think that that is necessarily healthy. For me we would be better off if we had a situation where students are fine tuned and optimized for a better world at large. Because what if the competition

has bad virtues to start with? So because oftentimes you want to know your competition in order to outwit them. So why would we want to spend resources to outwit the competition when it might be a better silent ideal out there that is not pursued. So even though the notion of internationalization and competitiveness is inscribed in 21st century skills, which is my understanding of what it is, I think it could be mistaken if we did not look for a better ideal for the world.

Professor Julian's definition of 21st century skills:

Colleen Fairbanks writes about what makes some teachers more thoughtfully adaptive than others, so I think, to me, the big 21st century skill is for the teachers to be thoughtfully adaptive, in terms of the implementation of curriculum, in terms of the students they work with. If there's a diversity that they haven't encountered, how can they be thoughtfully adaptive in terms of their pedagogy or instruction? Being thoughtfully adaptive is something that I see as a 21st century skill for teachers, and so therefore, part of what we try to do is think about context, empathy, flexibility, big picture. For example, we're looking at high stakes assessment.

That's the theme this year, in the leadership class, and so now we're thinking about, what about English learners and high stakes assessment, the common core, that dimension of high stakes testing. How do children of immigration complicate high stakes testing, and discourse about

accountability and school performance and achievement and stuff like that?

Professor Iria's definition of 21st century skills:

Something that we've needed for a while. I got a master's in instructional technology, so I've been working with technology for years, and when I first came here, students actually had a technology portfolio we had to check stuff off of. Then when the new teacher standards came in, those evidences came in, things changed and we dropped that, because theoretically, technology should be infused in everything we do.

That is happening now, as some professors have retired and we've gotten some younger people in here. I'm just telling you the truth. We've found that there's more technology being infused into our courses, and so I think the first few times, I really looked at the 21st century skills.

I was looking at more from a technology standpoint, and now I look at it more as an avenue for building those cross-cultural competencies and for learning about global awareness and global citizenship and that kind of thing. Even though global awareness is listed as one of the 21st century skills, sometimes I think it should be the other way around.

Professor Declan's definition of 21st century skills:

I'm laughing because it's not just been thrown around these days. It was thrown around back when I was an assistant principal in the '80s and a principal in the '90s, deputy superintendent in the late '90s. We had talked about that for a long time.

What does 21st century skills mean? I think it means the same thing that we were saying many, many years ago, that our kids need to be able to think and to function at higher levels of thinking and functioning. In its simplest terms, 21st century skills are on the high end of Bloom's Taxonomy, not on the knowledge and comprehension in Bloom's Taxonomy.

Now, what I find is interesting with that is that – because when I teach Curriculum Leadership, I get all the way down to teaching those people one more time how to write an objective, how to assess an objective, how to write an activity, how to make sure that activity is directly aligned in the objective and the assessment to it. Do you know what I find? Most of my students can't. They can't.

Professor Lola's definition of 21st century skills:

Well, it's having to do with working with other populations and get rid of that tolerance thing that we do, and having a healthy respect for other people's cultures. We're Americans and we think we're right about everything, think we know it all, but we can do better, as Americans.

Professor Margot's definition of 21st century skills:

I think of 21st century skills as being the technology, the global awareness, having students being able to access and evaluate information, using media, more than just the technology, analyzing the media, creating products and not just the student teachers using technology, but the student

teacher allowing the students to use the technology to be in the learning, and basically being flexible and adaptable.

21st Century Skills in the Classroom

The definitions of 21st century skills offered by the professors provide insight into the complexities of understanding this widely used term. As the research throughout this study has demonstrated, 21st century skills is a global outcome, yet the term presents challenges to individuals who try to quantify this term. Additionally, just as it is difficult to define 21st century skills, follow up interview questions demonstrate that putting 21st century skills into action is equally ambiguous. When the professor participants were asked *how do they prepare pre-service teachers to teach 21st century skills*, the responses varied. The following professor responses demonstrate the varied implementation of these skills within the higher education classroom. Professor Ethan states, “Which is to have them to appreciate grand virtues, cross-curricular materials because when you bring them there you are actually making them grander. You are making them proficient in the skills concurrent with making them better global citizens as well.”

Professor Julian provides a response unique to his goals as a professor but not necessarily consistent with the typical understanding of 21st century skills. Professor Julian’s response is as follows:

Yes. Talking a lot about context and promoting that idea of teacher identity, so good teaching is responsive to context, challenging different commercial packages, challenging the idea that everything works for everybody.

Especially in TESOL, that's historically – there's been an association with method, looking for the method, and so really challenging that method, the concept of method and looking more at context, circumstance, and reflection, empathy, issues of self-fulfillment.

For example, if I don't feel fulfilled, how can I adapt my practice so I'll be more fulfilled, in terms of my relationships with other colleagues, with the curriculum. The leadership class focuses on them, getting in touch with their uniqueness as individuals and how that might be leveraged to promote self-fulfillment in a community of learners.

Professor Iria provides the following explanation.

We go over them in class, one by one. We talk about them. They have to do some reading. We then move past exactly what they are into what would this look like in the classroom, and what I've done in my curriculum class the last few years that seems to work pretty well is to just put old-fashioned chart paper up on the wall and they get in groups and jot down ideas for what this might look in the classroom, and then we compile all those.

I put them up on Moodle, so everybody has access to them, so that when they're writing their lesson plans, it gives them something to work with. A lot of them lean heavily on the technology aspect of 21st century skills, because that's easier for them. We really specifically teach those, so that they can use them.

Professor Iria, perhaps because her course offering put her directly in contact with pre-service teachers prior to student teaching demonstrated the most fluidity and comfort with 21st century skills, and she demonstrated a genuine connection to 21st century skills surfacing within her daily course instruction.

Professor Declan provides an answer that demonstrates awareness of 21st century skills yet does not provide specificity. However, Professor Declan clearly explains that he puts forth effort to enhance the 21st century skills of his students. Professor Declan's response is as follows:

That's a good question. If I am teaching them to use 21st century skills themselves, then I've got to teach them – and the word I said was “used,” which is the application level of Bloom's Taxonomy. I've got to have them functioning on the higher levels of Bloom's Taxonomy.

I can't make my assessment of it simply something that a multiple-choice question of whether or not what does virtual collaboration mean? What I've got to see is that they are actually virtually collaborating. What I have to do then is set up the situation almost where they don't have a choice.

Now, I've got to tell you, in the last three years, the number of folks who now have used Google Docs at some place, almost everybody has. When it first started, it was go to Google, go to Google Docs. Of course, Google Docs has now changed to Google Drive, but they understand all that.

Now, even though they understand it, what I want them to do is to apply it in ways that they haven't thought about doing, and then what I actually see. They post, for instance, here's my school law group. Those are class

resources, and here's the discussion forum, and the first forum was, in my classes, everybody's assigned mentor, which is I ask folks who have been in the program to help other students.

That's the collaboration skill. That's keeping people attached to the program who have been through the program. One of the first things that I ask this group to do, I said, "Please post your mentor's response to the question, what do I need to do to be successful in Dr. D's law class." How do I know they've done it?

Well, there are all the posts, some of them longer, some of them shorter, and then one of the things that I do right after that is go back, and then we have a discussion about what do people say that you need to do to be successful in my class? I said, go back and look at the similarities from everybody.

In other words, we are constantly using the virtual collaboration along with the actual collaboration, and I'm seeing what they post. I'm knowing that they are doing that. That's how I see those skills. Then, I know you know – well, I don't know if you know, because you're not in the MSA program.

Professor Lola explains that her 21st century instruction occurs regularly. She states "It's always ever present, when I'm teaching." Finally, Instructor Margot, much like Professor Iria, provides an answer that underscores her proximity to pre-service teachers. Instructor Margot explains:

I'll be the first to admit that it is kind of hard, and even from the teachers in the classroom already licensed have – I don't want to say a difficult time with 21st century skills, but I'm not sure all the understanding is there as well. It's very novice right now, and it's hard for me, sometimes, as well.

One thing we do under a student teacher's lesson plan is have them reflect on what 21st century skills they think they're using in their lessons, and then go back and analyze the success of the 21st century skills that they've used. For example, if it is some form of technology, do the students use the technology?

Or if a PowerPoint or something was shown to the students, were the students engaged, things like that? I'll admit, it's difficult, and I'm still learning in that area as well, just the communication and collaboration. I think, personally, I'm trying to get my student teachers to see that 21st century skills is more than just technology.

Analysis of the professor responses indicate that implementing 21st century skills in the higher education classroom varies according to the professor and the course design and focus. Additionally, the varied implementation among the professors suggests that because 21st century skills remains an ambiguous term, implementation of these skills rests with the eyes of the beholder. Further discussion about the implementation of 21st century skills will emerge in the document analysis section of this research study. However, it does not appear that this term has been operationalized by the School of

Education; thus the definition of the term remains varied in definition and implementation.

Alignment to Teacher Evaluation Standards

Because the interview protocol was semi-structured, follow up questions emerged out of the interview process. One essential question that naturally resulted from the interviews pertained to the relationship of professor instruction to the Teacher Evaluation Standards. To clarify, the Standards are the measures by which public school teachers are evaluated as part of the yearly observation process. This question is important because the Standards specifically measure a teacher's incorporation of 21st century instruction in the classroom. Additionally, since this research study is attempting to assess the linkage between higher education pre-service teacher preparation and actual teacher performance at the public school setting, this question captures the degree of the connection that exists between pre-service training and teacher performance in the classroom. The question asked of the professors was as follows: *Do you incorporate the recently implemented state observation tool for classroom teachers into your daily instruction? If so, how?*

The responses to this question varied and illustrated an inconsistent focus on these teacher standards. Professor Ethan stated, "No, I don't—because we teach different courses, and each has its own requirements." Professor Julian's response indicated a tangential connection to the standards: "When the course is offered in Spring semesters I have them write a short individual grant for summer professional development (National Endowment for the Humanities) and also a book review for TESOL EJ (I think this corresponds to the Leadership components). Otherwise, I don't." Professor Iria initially responded that her courses do not include instruction related to the teacher standards

because this instructional component is incorporated into the student teaching course.

However, after reflection, she then recanted her answer and explained,

We do use those teacher standards. I haven't even thought about that. I was thinking about those in a different light. We use those as far as basically as lesson planning goes, and that's where the 21st century skills and global awareness came from.

Professor Declan provided specifics about where the standards enter his courses: “I do extensively in one course - ADMN 6130 Instructional Supervision and to lesser extent in ADMN 6100 - Fundamentals of Educational Leadership. The ADMN 6130 is built around the NC Teacher Evaluation Process.” Professor Lola’s response was as follows, “No, I'm not familiar with that.” And finally, Instructor Margot stated, “We use the in-house standards on our STAR instrument, it’s the Student Teaching Assessment Rubric.”

The data in this case portray an inconsistent use of the Teacher Standards within the instructional practices of the professors. It appears that the professors focus their course on the overall theme, which may or may not leave room for the incorporation of the Standards into classroom instruction. Clearly some professors extensively emphasize the Standards in their courses while other professors are not familiar with the Standards.

Document Analysis Triangulation

The research question for the higher education component of this study set out to examine the influence of *Global Vision Tomorrow* on the School of Education’s endeavors to prepare pre-service teachers to provide public education students with a 21st century education. The primary thrust of this research question was borne out of a desire to understand the influence of globalization on education—a connection demonstrated by

the linkage between *Global Vision Tomorrow* and the Internationalization Committee. Document analysis demonstrates the presence of a global influence on the School of Education. To begin, the analysis examined the following critical School of Education documents to uncover the existence of globalization's influence on education, particularly via 21st century skills and outcomes: the School of Education 2012-2013 Undergraduate Catalogue, the School of Education 2010-2015 Strategic Plan, and course syllabi. The document analysis process consisted of examining these critical documents for the following key terms: globalization, 21st century instruction or skills, higher order thinking, engaged learning, authentic connections, and technology infusion. After examining the documents for the critical terms, the emergent themes were categorized for analysis.

Analysis of these documents reveals the presence of important themes relevant to the impact of globalization on education. To begin, the 2010-2015 Strategic Plan identifies major goals, and the first goal on this list is as follows:

The [School] of Education will graduate highly effective and ethical 21st century professionals - child and family development professionals, teachers, school leaders, and counselors – who will have a positive impact on children, youth, families, communities and schools and who will be successful in urban and other high need settings. (*College of education strategic plan, 2010-2015*)

As is commensurate with other aspects of this document and other university documents, the term 21st century is utilized but not clearly defined. Goal 9 of the Strategic Plan demonstrates the global connection. The goal states, “The [School] of Education will

enhance the global awareness of faculty and students and prepare graduates for our globally interconnected world,” (*College of education strategic plan, 2010-2015*). The action items for this goal rely on the role of the Internationalization Committee to devise a plan for “. . . curriculum, faculty development and student development,” (*College of education strategic plan, 2010-2015*). Additionally, internationalization modules must be infused into three courses for each undergraduate School of Education major (*College of education strategic plan, 2010-2015*). At the classroom level, it appears that professors must incorporate “Revised syllabi to reflect the inclusion of instructional modules with global perspectives,” (*College of education strategic plan, 2010-2015*).

Consistent with the 2010-2015 Strategic Plan, the School of Education Undergraduate Catalog frequently references 21st century in varying contexts. For example, one reference states, “Knowledge relevant to life in the 21st century,” (*College of education, 2012, p. 118*). Another reference describes student outcomes and skills, including “Use of 21st century skills,” (*College of education, 2012, p. 118*). In the section titled Minor in Secondary Education, a statement describes the minor as follows:

The programmatic purpose of the Minor in Secondary Education is to prepare excellent and reflective teacher candidates in the fields of English, Mathematics, Comprehensive Science, and Comprehensive Social Studies to successfully utilize 21st Century knowledge, skills, and dispositions for addressing the demands of an ever-changing global and ethnically diverse society, community, and classroom while implementing effective, research-based content pedagogy to meet the individual cognitive and emotional needs of all students, and systematic and reflective analysis of

connections between practice and student learning. (*College of education*, 2012, p. 122)

Yet this statement does not define 21st century knowledge. In fact, 21st century appears to be a reference point or antecedent indicating that any information or content that follows must possess relevance and importance, even if the term itself lacks a clear, operationalized definition.

An examination of the professor course syllabi provided limited, but insightful information about the impact of globalization on education. To begin, out of the 6 participants interviewed for this study, 4 individuals provided a course syllabus. For example, Professor Iria, the individual who works with pre-service teachers prior to their student teaching experience, clearly references 21st century skills and knowledge relevant to life in the 21st century. Again, consistent with the findings, 21st century remains an undefined term. In general, the course syllabi of the 3 other participants reflected information specific to the particular course content; therefore, it seems that a direct connection between globalization, 21st century skills, and the course content was not always visible through the syllabus.

Higher Education Summary Findings

The higher education analysis provides a response to the following research question: Based on the vision of the Global Vision Tomorrow Initiative, how has the Till Height University's (THU) School of Education (pseudonym) prepared pre-service teachers to provide public education students with a 21st century education? Initial review of the participant interviews and document analysis indicate that at the higher education level an awareness of globalization and 21st century education exists among the staff and

faculty. The participants demonstrated an understanding of 21st century skills and clearly articulated answers offering their own insight into this concept. However, the definitions among the participants were inconsistent. Each individual offered a slightly different perspective on the meaning of 21st century skills. The same outcome occurred with respect to the participants' conceptualization of globalization. As the previous analysis indicated, the participants operationalized globalization in varied outcomes. Document analysis illustrated an acknowledgement of 21st century skills as an important word in current education vernacular; however, no clear definition of this term emerged in the documents. Finally, in direct response to the research question, it does appear that through the Internationalization Committee, THU did respond to the mandates of the Global Vision Tomorrow Initiative. While *Global Vision Tomorrow* serves as an historical benchmark to reference a point in time when globalization as a force began to pressure institutions to adapt to global forces, the university clearly has incorporated language couched in the framework of globalization either in conjunction with *Global Vision Tomorrow* or as a direct result of the recommendations within *Global Vision Tomorrow*.

Part II: Public Middle School Findings

The public middle school component of this research study consisted of participant interviews and classroom observations. The focus of the interview centered on ascertaining the teacher's knowledge of globalization, 21st century instruction, and the instructional implementation of 21st century skills in the classroom. The classroom observations focused specifically on observing the teacher deliver instruction. It must be clarified that the observation was of the teacher in particular and not of the students. The

research agreement between the researcher and the school district central office allowed for teacher observations. Additionally, the study emphasis is on teachers and their instructional practices. Five teachers from two different schools participated in this component of the study. The teachers graduated from THU School of Education within the last five years, and this timeframe represents a critical demarcation because it consists of the period in which the Internationalization Committee initiated an international focus within the School of Education. Finally, the data analysis process used to analyze the teacher participant transcripts followed the same steps as the process developed in the professor participant section.

Participant Profiles

Of the five public middle school teachers who participated in this study, four participants teach at the same school—Jewel Middle School. Teacher Katie is a 6th grade social studies teacher who graduated from THU in 2010. Additionally, teacher Katie conducted her student teaching at Jewel Middle School. Teacher Suzi currently teaches 6th grade social studies and graduated from THU in 2009. Teacher Holly currently teaches 7th grade science and also graduated from THU in 2009. Finally, Teacher Nancy currently teaches 7th grade social studies and graduated from THU in 2012. It should be noted that teacher Nancy student taught at Jewel Middle School. The fifth participant—Teacher Lenore—teaches at Monroe Middle School. Teacher Lenore is a 7th grade language arts teacher and graduated from THU in 2009. Finally, the schools at which the participants teach are part of Crown City Schools (CCS).

Definitions of Globalization

The study attempted to understand the impact of globalization on education at the micro level (i.e. the classroom). As a result, key questions attempted to assess the teacher's understanding and definition of globalization. The purpose of assessing the teacher's definition of globalization resides with a focus on situating the teacher responses within a context that demonstrates the overall knowledge of this topic. If teachers can clearly articulate a definition of globalization, then it provides evidence of their awareness of schools within a global environment. The following data indicates that the teachers, similar to the higher education participants, possessed varying definitions of globalization but also shared consistent themes.

Teacher Katie defined globalization as follows:

I think it's meaning that you're globally aware. You know what is going on in the world, the expectations of other countries, you're aware of current issues, you are worldly, you have learned about other cultures and other places. I guess it's the opposite of ignorance, to me.

Teacher Suzi's definition of globalization is as follows, "Globalization, I think about what outside influences are influencing our students. That's media, technology, social networking, how is the current event, the news, the things that they see every day, how is that impacting our students?"

The following response illustrates Teacher Holly's definition of globalization.

Well, I think it's that everybody needs to be aware of that it's not just, "Here we are at [Jewel] Middle School, in [Teacher Holly's] classroom." It's all over the world, these certain things apply, and this is how, in this

day and age especially, there's so many things you can do with science, but it used to be, when we didn't have so much globalization, things like diseases would not be passed as quickly, with the air travel.

You can relate that to everything, so I think of it as everybody needs to know what's going on with everybody else in the world, because we're all interconnected. Science is a great way to show that, because you can show it with DNA and you can show it with all sorts of different things.

Teacher Nancy defined globalization in the following manner,

What I teach my kids, as a social studies teacher, is that it's like cultural diffusion that happens around the world, and that no longer are we competing just with each other, but with the entire world, and that we're all participating in one unified experience, as opposed to separate experiences.

Finally, Teacher Lenore provided the following definition of globalization,

Well, I tell the kids that we do live in a global society now, and we have a global economy, and I think that, in the classroom as far as globalization, the kids, here at [Monroe], anyway, they all have to take a world language. I guess I would say interconnecting with other places, globally.

These definitions clearly demonstrate a uniqueness in their responses; however, a consistent theme emerged from the responses—awareness of the world at large. Each response in some measure aligns with this theme of awareness, yet, and perhaps more importantly, the teachers recognize that their role within this context is to heighten the global awareness of the students.

21st Century Skills

With respect to teacher definitions of 21st century skills, the transcripts indicate that the teachers generally understand 21st century skills and are knowledgeable about this particular concept. Yet, the results also highlight that the teachers possess an inconsistent definition of 21st century skills. The following responses illustrate their definition of 21st century skills.

Teacher Katie:

I think that just means preparing your students for what is ahead and what's happening now. I mean, in some essence, 21st century learning skills has almost become an outdated term, because we've been pushing it so much. It's almost expired, but for me, it means my students are presenting. They understand what it would be like to be in a job. They're working in groups, because very few jobs are every working alone. You're talking your work to the next level. Time management, to me, is a part of that, presenting, getting up in front of a group of people. That, to me, is 21st century skills, and adding in the technology component. Are you able to do all these things, and technology-based?

Teacher Suzi:

21st learning skills is how are you going to apply this to the real world? How are you going to learn a current event topic or learn about Ancient Greece, and how can you apply that to today? You can take democracy and you can then adapt it to talk about current issues going on within our government, so just how can you apply and learn the basics?

Teacher Holly:

That was really hard for me at first, when they started talking about it. I'm like, "What? What do they mean?" But I think it's just that, as difficult as it is, because we have that interconnection with the globalization, we all have to cooperate and work with people we don't want to work with, and that's a big part of the 21st century skills, is maybe you're not successful at getting every kid to cooperate with another kid, but setting the expectation up and trying to teach a process for how to do that, I think that's part of it. The technology use is really valuable, because a lot of things like, even spell check, you used to have to be a very good speller to have certain jobs. Now you don't necessarily need to spell, so there's certain things that kids could probably look up on Google, as far as memorizing, but then there's other things that they need to memorize, so that they can figure things out.

The 21st century technology includes the technology, but the interconnectedness and looking at how you used to have the mimeograph, with the copy machines, and now we have the iPads and the emails and all that. You have to be aware of it, of how the world connects.

Teacher Nancy:

Well, to be honest, I think these are things that have been going on, but that they're set up in a framework and defined in this way, hopefully in one way, in education, so creativity and innovation. Hopefully that's been

going on, but now it's preparing us for the 21st century. How would I define it?

I would describe it as a set of skills, or maybe not even skills, but ways of participating in education and skills, that will prepare them for the future, so participating with each other, collaborating, creating, life skills, financial skills. It's broken down into what all you need to participate, as an adult, in the 21st century world.

Teacher Lenore:

Well, I think that 21st century skills, I think it has quite a bit to do with technology, using technology in the classroom, or having the kids use technology. I know my principal, we would have meetings about using 21st century skills. I would say it's using critical thinking skills, perhaps, would be 21st century learning.

The teacher definitions of 21st century skills point to two clear themes: preparing students for a 21st century world and technology. The themes present in these definitions demonstrate a consistency among the teachers with respect to their conceptualization of 21st century skills. Additionally, this similarity is important because it points to a common conceptualization of 21st century instruction shared by the participants; and the commonality perhaps indicates the level of influence of globalization on education at the classroom level. Essentially, if the term 21st century instruction represents globalization in action, then clearly globalization in action now permeates the classroom (i.e. the micro setting).

However, analysis of the teacher responses to the following question, *how do you provide your students with 21st century learning skills?* portrays a separation between the theoretical and the reality of teaching. While the teachers clearly articulated their definition of 21st century instruction, their description of 21st century instruction in action lacked internal and external alignment. In this case, internal alignment equates to the consistency between the teacher definition of 21st century learning skills and the teacher's description of the manner in which they teach 21st century instruction in the classroom. External alignment describes the consistency or similarity between the participant responses. It appears that a level of diffusion occurs between conceptualization and implementation of 21st century skills. The following teacher responses help to illustrate this point.

Teacher Katie:

I did talk about this already, but we are always presenting in class. They also take on different roles in the classroom and in their groups, so they rotate with that and we have a leader. There's a reporter, who reports how the group's doing, a recorder, who's recording things down, and a go-getter, who's in charge of gathering all the supplies and things like that. They quickly learn their role, but they also get to switch. Like I said, we present constantly, because it's important to be able to speak to people, and it's also important to be able to respond to what somebody is saying. They're required to listen to a presentation, and then they have to ask questions, based on that.

They have to listen to other people. We also learn how to debate, but instead of arguing, they have to say, "I see your side, but this, that, and the other." I think that's a big part of it. I'd say 80 percent of my class I hold, using technology. I don't think I would know how to teach without it, now.

Teacher Suzi:

A lot of times, current events for social studies, but also allowing them to make the connections, giving them activities of where they're comparing and they're contrasting. Maybe they're writing a modern-day epic, where they're making it more about them. They're creating their own version of something that's relevant to them.

Teacher Holly:

Well, we do a lot of group work, and we do a lot of social expectations, which I think is really important in middle grades, because we're seeing early. I'm seeing people working in jobs who are rude and obnoxious, and I'm thinking if I acted like that, I would be fired, or I look at my students and I say, if they act like this in a job, they're not going to succeed, they're not going to be successful, because their attitude's going to turn somebody off.

That's part of the working with the social skills and the group work, but also pushing them to think more so than just the honor students like you to give them the answers, or to help them. They're very needy, and sometimes they don't even want to read directions.

Now what I do next? Now, what do I do next? Now what do I do next? I try to make it so – for example, a lesson I had today, it was a warm up and I made it too hard by accident, but I wanted them to think. Instead of giving them a pedigree chart for them to analyze, I had them create one, based on a story, to incorporate the common core.

But I didn't give them all the information they needed to do it properly. I wanted them to do a draft, and then I said, “Now, go back and prove how this can be. How do you have to correct this chart to make it be?” I try to stretch them as far as, “Yes, I know how to make a pedigree chart. I know what the symbols are.

I know what they mean,” but if there's something wrong, can you figure it out? Can this be true or not, and can you prove it? I try to stretch them that way, because I think, when we're connected with everybody else, you have to be thinking one step ahead of the next person, if we want the US to be great forever.

Teacher Nancy:

We do things like, instead of just taking notes, as far as the creativity and innovation, we'll do a foldable. Or like today, we watched a video. Instead of taking notes from the video, I had them jot down every worked that seemed important, and then they created a Wordle with it, but they didn't do it on computers, because they didn't have them, but they just did it with artwork.

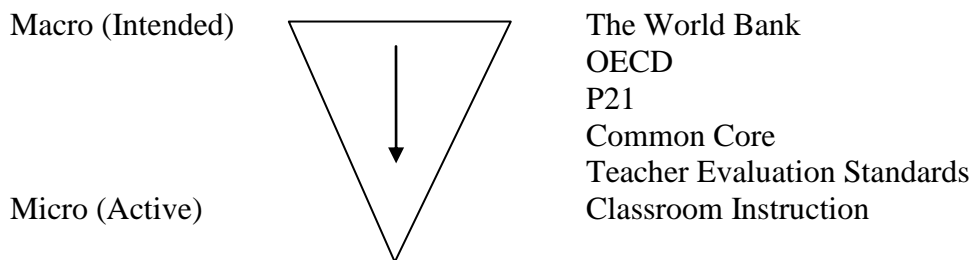
They creatively used that in some kind of way, and then, because they're in groups, they're always collaborating. For me, because I'm social studies, a lot of the categories are covered, just in my content, financial, all those economics and global understanding and stuff. That happens naturally, because of my content.

Teacher Lenore:

Well, I use discovery education in the classroom. Also, I use a new program that [CCS] has just recently purchased, called Bright Source, in the classroom.

Examination of the teacher responses demonstrate a spectrum of answers—answers which perhaps hint at varying degrees of 21st century instruction in the classroom. Without necessarily commenting on the quality of instruction as described by the teachers, it is evident that a diffusion of implementation occurs at the classroom level. The intended curriculum versus the active curriculum best describes this point of diffusion. While the teachers may clearly articulate 21st century instruction, which is the intended aspect of the curriculum, the implementation, or active aspect of the curriculum, varies from teacher to teacher. Figure 1 below provides a pictorial depiction of the macro to micro effect of globalization's impact on education at the classroom level. Education policy emerges at the macro level, yet once it reaches the classroom level it diffuses through the process of implementation.

Figure 1: Policy diffusion at the classroom level



Finally, Figure 1 depicts the macro organizations and policies that influence instruction at the classroom level. As the literature illustrated, such global organizations as The World Bank and OECD create policies that directly connect to the Common Core Standards, Teacher Evaluation Standards, and then manifest at the classroom level.

Teacher Observations

In order to triangulate the teacher interviews, participant observations were conducted. The participant observations consisted of a thirty minute classroom visit. During the classroom observation, the details of the lesson were scripted. Also, arrangements were made to observe the teachers; however no specifics were provided as to the intentions of the observation. The teachers were not given prior notice as to what the observer would be specifically noting or observing. Finally, the teacher observations were analyzed according to the 21st Century Rubric, which is an adaptation of the H.E.A.T. Rubric (Moersch, 2011). The analysis consisted of examining the observation script tape transcript to assess the presence and/or level of each 21st century skill and then assigning a score value according to the constructs of the 21st Century Rubric. The findings from the 21st Century Rubric analysis are highlighted in Table 4.

Table 4: 21st century rubric analysis indicators

21st Century Skill	Teacher Katie Score	Teacher Suzi Score	Teacher Holly Score	Teacher Nancy Score	Teacher Lenore Score
Higher Order Thinking	2	2	4	2	5
Authentic Learning	2	4	4	1	1
Engaged Learning	1	1	3	2	1
Technology Infusion	4	3	1	0	1
Total	9	10	12	5	8

Table 4 depicts the analysis of the teacher observations through an examination of four critical 21st century instructional components: higher order thinking, authentic learning, engaged learning, and technology infusion. These 21st century skills represent indicators that demarcate the presence and extent of global influence in the classroom. Each individual 21st century instructional skill received a score point according to the rubric in Appendix C. The scores merely demonstrate the spectrum of 21st century instruction present in each classroom. It should be noted that according to the rubric, a perfect score is 20; thus, based on the observation analysis, the closest to a perfect score

is Teacher Holly with a total score of 12. Teacher Holly incorporated a lesson that engaged her students in higher order thinking and authentic learning. In comparison, Teacher Nancy, with a total score of 5, provided her students a lesson that was low on the higher order thinking scale.

The following section provides a brief overview of each teacher observation.

Included in the overview are the following: the lesson objective, alignment to Common Core/Essential Standards, materials description, and lesson synopsis. The lesson synopsis provides a brief description of the instruction observed during the classroom visit.

Teacher Katie Lesson Description

Subject: 6th Grade Social Studies

Lesson Objective: How do Ancient Greek achievements in government, culture, and law influence us today?

Alignment to Common Core/Essential Standards: 6H2 *Understand the political, economic and/or social significance of historical events, issues, individuals and cultural groups.*

6C&G1 *Understand the development of government in various civilizations, societies and regions.*

Materials: PowerPoint presentation, iPad, notebook

Lesson Synopsis: Teacher Katie utilized a PowerPoint presentation to review the key concepts directly related to the lesson objective. Students also utilized iPads, which allowed them to look up key information throughout the presentation. During the observation, Teacher Katie asked questions of the students that demonstrated both remembering and understanding on the Blooms Revised Taxonomy.

Teacher Suzi Lesson Description

Subject: 6th Grade Social Studies

Lesson Objective: How do Ancient Greek achievements in government, art, and architecture influence the world today?

Alignment to Common Core/Essential Standards: 6H2 *Understand the political, economic and/or social significance of historical events, issues, individuals and cultural groups.*

6C&G1 *Understand the development of government in various civilizations, societies and regions.*

Materials: PowerPoint presentation, vocabulary chart, textbook, handout (map of Greece)

Lesson Synopsis: Teacher Suzi utilized a PowerPoint presentation to review the key vocabulary words. As the teacher went through the Power Point presentation, she would stop to discuss some of the visuals on the Power Point in more detail with the students. After completing this review of key terms, the students were given a handout with a map of Greece in order to identify key places on the map. The students were able to use a textbook for this task, and the students were allowed to work collaboratively on this last task. During the observation, Teacher Suzi asked questions of the students that demonstrated remembering, understanding, and analyzing on the Blooms Revised Taxonomy.

Teacher Holly Lesson Description

Subject: 7th Grade Science

Lesson Objective: Why are there variations and blends of traits in organisms? Students will be able to distinguish among DNA pairing, RNA pairing, the Triplet code, and interpret the “Code of life.

Alignment to Common Core/Essential Standards: *7L2 Understand the relationship of the mechanisms of cellular reproduction, patterns of inheritance and external factors to potential variation among offspring*

Materials: Notes, white board

Lesson Synopsis: The teacher began the lesson with a warm-up, which required the class to respond to the following question: On your sheet of loose leaf, create a Pedigree Chart for the following: Your little brother is color blind, which is a sex-linked trait. Your dad is not color blind and neither is your mom, but your mom’s dad is color blind (your grandpa). Use a pedigree chart to show how this trait was inherited. Be sure to include you and your brother. After the students worked out the solution to this problem as part of a class discussion, the teacher then provided an overview of genetic code. Finally, the students were grouped into fours and given the objective of identifying DNA based on assigned strands. The students experienced the applying level of Blooms Revised Taxonomy as part of the lesson.

Teacher Nancy Lesson Description

Subject: 7th Grade Social Studies

Lesson Objective: Be able to identify the major cause and effects of World War II. What were the key people and events of World War II?

Materials: White board, loose leaf paper, Vocabulary assignment on Overhead Projector

Alignment to Common Core/Essential Standards: 7.G.1 *Understand how geography, demographic trends, and environmental conditions shape modern societies and regions.*

Lesson Synopsis: The lesson began with a warm-up in which the students had to respond to the question: what is propaganda? Next the students were given the task of completing a vocabulary review chart, which was a box of six sections requiring the students to complete two of the following tasks: crossword, in your own words, put in a sentence, draw a picture, rainbow, or pyramid. Finally, the students were also given the option of completing a vocabulary cover sheet for their interactive notebooks. The lesson observed required the students to utilize the remembering level of Blooms Revised Taxonomy.

Teacher Lenore Lesson Description

Subject: 7th Grade Language Arts

Lesson Objective: Analyze poem using form, imagery, and historical context

Materials: Overhead projector, YouTube video clip, textbook, handout

Alignment to Common Core/Essential Standards: CCSS.ELA-Literacy.RL.7.5 *Analyze how a drama's or poem's form or structure (e.g., soliloquy, sonnet) contributes to its meaning.*

CCSS.ELA-Literacy.RL.7.7 *Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film).*

Lesson Synopsis: The lesson observed began with a focused warm-up. The students examined different pictures of seasonal images, such as a winter snow or fall leaves, and then the students had to write a haiku about the picture. After reviewing the warm-up, the class then read a poem from the textbook. A brief discussion about the poem took place

and was followed by work on a handout that constituted completing a graphic organizer. The students then watched a YouTube video clip in which the author of the poem read the play aloud. This last aspect of the lesson provided an opportunity for the students to compare the poem on paper to the actual audio depiction of the poem. The lesson required the students to use the creating level of Blooms Taxonomy via the process of writing a haiku.

Based on these observations, an analysis of the lessons utilizing the 21st Century Rubric was conducted. It must be noted that the lessons provide a window of insight into the daily instruction provided by the teachers. Again, to reiterate, the teachers were not given lesson expectations prior to the observation so that the researcher could capture an authentic lesson. Therefore these observations reveal a typical instructional experience for students in the 21st century. The researcher is not suggesting that these results can be generalized; however, what is at stake here is a descriptive analysis of lessons in a 21st century context. Finally, units and lessons follow a typical progression in which introductory material begins a unit, and more complex thinking material serves as the capstone to the unit. In the case of the 6th grade social studies classes, the teachers were providing introductory content essential for enhanced activities later in the unit.

Alignment between Higher Education and Public Middle School

The second component of this research study responds to the following research question: how do THU graduates effectively deliver global instruction as defined by teaching 21st century skills? The purpose of this question attempts to understand how effectively THU trains pre-service teachers to provide 21st century instruction at the classroom level. Specific interview questions were asked in order to assess the linkage

between THU and their teacher graduates. The responses below offer insight into this connection. The participants were asked directly if the professors provided them with 21st century instruction.

Teacher Katie:

I think it was always implemented in everything that we did. I can't remember not hearing that. My friends and I joke, it was like the token phrase when we were going through school. You had to know your 21st century skills, so I don't feel like it was one particular class, but I feel like the class I got the most from, with my contact, was my methods class. For math, I had Dr. [Joe], and then I can't remember who I had for my Social Methods class, but when we would go there, he would have us try out different activities on how to present the activity. I probably use at least 50 percent of those activities in my room, that are all 21st century-gearred.

Teacher Suzi:

I remember one class in particular, and it was one of the little cohorts that we had to have. We were grouped together as teachers, and we would meet to check in with this professor. There was one lesson she did with us, where she gave us money, and we had to go around the school and we had to buy things, but we were only allotted so much, based on whatever job we had. It was all different for each person.

That is probably the only time I feel like 21st century skills were ever really addressed, was in that little small cohort. In my classes, I think it

was more trying to teach us concepts and things that we needed to do and trying to get resources for us, to be prepared, not really ever teaching us how to adapt to the 21st century. I think it's a new idea that's hitting schools.

Teacher Holly:

No, not really. I wouldn't say so. We had one course that was MDSK, that stretched us with technology and stuff, and I think we were coming to the understanding of what it might mean, and then a lot of courses – virtually, all of the courses you have to do group work and stuff, but I think we left school without really knowing for sure what 21st century skills were.

Teacher Nancy:

Most mention them. My seminar did, for sure, during student teaching. We had to show how we were using them, during the seminar. I don't remember what that class was called, but it was the class that you took alongside your student teaching, and we did the ISL project. It was required in the ISL project.

There was a class that was specific to middle school kids, and that did not, but then there was a curriculum class. See, I can't remember any of the names of the courses, but I remember learning about 21st century skills in at least three courses, at least. It wasn't mentioned in my education course, that I had taken a few years back, before.

I went to school for eight years, so the things they taught me when I first started school are different than the things that they were teaching towards

the end. I don't know if they do actually teach those things now, at the beginning.

Teacher Lenore:

I graduated in 2008. I'm pretty sure that I did have a few classes that did mention 21st century skills, but I can't remember specifically. It's been a while.

The responses illustrate a critical point—the more recent the graduation date, the more likely it is that the teacher encountered direct exposure to a 21st century instruction and framework at THU. However, as the recent graduates pointed out, for their experience, the 21st century framework was more pervasive. In this case, the specific responses of Teacher Katie and Teacher Nancy, two individuals who graduated recently (within the last two years), illustrate the impact of one's graduation date on 21st century instruction. Therefore, from these results, it appears that a connection exists between the coursework provided at THU and the implementation of 21st century instruction at the public middle school level. However, this connection exists with several caveats. First, the sample size is 5 teachers; thus the results cannot be generalized. Second, as previously pointed out, recent graduates appear more likely to have received exposure to 21st century instruction than did graduates exceeding the recent time span.

Public Middle School Summary Findings

The public middle school findings demonstrate that the participants, who are recent graduates of THU, understand 21st century instruction. Their interview responses suggest that 21st century instruction as a term and a concept is relevant to and present in their instructional methods. However, it is noted that inconsistencies occur between the

intended curriculum, which in this case is represented by the definition of and concept of 21st century instruction and the active implementation of this curriculum, which equates to clarifying answers and lesson observations. A point of diffusion occurs between the conceptualization of 21st century instruction and the implementation of this form of instruction. The point of diffusion indicates that while globalization produces standardizing effects at the macro level, once the instruction is interpreted and implemented the standardization diffuses at the classroom level. Also, evidence suggests that alignment occurs between the preparation at THU and the understanding of 21st century instruction at the public middle school level. As previously stated, the more recent the graduate from THU, the greater the understanding of 21st century instruction.

CHAPTER FIVE: DISCUSSION OF FINDINGS

This dissertation began with an explanation of the problem as outlined in chapters one and two. Primarily, due to the forces of globalization via the pressure of business and industry, education policy makers at the macro level developed policy responses, yet the impact of these policy responses at the local level remains unclear. Essentially, there exists a need to understand the impact of globalization at the local, classroom level. Chapter three outlined the framework for the research method utilized to answer the two critical research questions. Chapter four presented the findings of the data. Chapter five discusses final conclusions from the data and puts forth key recommendations for education policy makers at the higher education and public school level. Finally, chapter five also incorporates a discussion of the following major themes present in the data: globalization as competitiveness theme, critical teacher consciousness, and 21st century instructional diffusion.

The study hinges on understanding the local effect of globalization at the classroom level through the compilation of data from two key sources: higher education professors and public middle school teachers. The data collection process enabled an assessment of globalization's impact on education as a linkage that occurs between a higher education pre-service teacher preparation program and public middle school teachers who participated in the said pre-service teacher program. In order to fully understand the global to local phenomenon, the following research questions were

devised: Based on the vision of the Global Vision Tomorrow Initiative, how has the Till Height University's (THU) School of Education prepared pre-service teachers to provide public education students with a 21st century education? And two, how do THU graduates effectively deliver global instruction as defined by teaching 21st century skills? The first research question speaks to macro level leverage exerted on policies implemented at the university level. The second research question seeks to understand and assess the instructional practices of teachers that result from the influence of globalization on education at the micro level. Because this study comprises two key components—a higher education component and a public education middle school component—the discussion that follows consists of two parts; however, the analysis in each part utilizes a consistent thematic, critical pedagogy approach to maintain uniformity. The importance of discussing the findings through this thematic perspective emerges out of the current global context that produced a scenario in which private industry influences macro global education policy decisions—decisions with implications at the national, state, and local level.

As has been demonstrated throughout this study, one byproduct of the standardization of education resulted in the emergence of the “Knowledge Economy.” For example, The World Bank conceives the “Knowledge Economy,” as follows:

1. Economic growth dependent on the knowledge, information, ideas, skills, and health of the workforce
2. Post-industrial shift from blue-collar to white-collar labor
3. Post-secondary education is one of the most influential determining economic productivity (Spring, 2009, p. 44)

And as Spring (2009) explains, The World Bank provides a detailed definition of the components of the “Knowledge Economy”:

1. Literacy for functioning in the day-to-day life of an economically advanced society
2. Literacy for manipulating information
3. Science and math literacy
4. Foreign language instruction, particularly in English
5. Civic education to achieve rule by law and a good government able to achieve economic development
6. Learning to function in multicultural groups
7. Learning to act autonomously (individualism)
8. Learning to use tools for retrieving and applying knowledge
9. Instruction is assessment-driven
10. Preparation for lifelong learning

The standardizing effect within public education, as measured by the impact of globalization, results from policies and curriculum frameworks infused by knowledge economy ideas representative of concepts promoted by The World Bank. Finally, these knowledge economy themes and ideals underscore the importance of developing human capital and the role of public education within this development process.

To understand the previous point, consider the connection between historical demographic circumstances and the development of human capital as a function of the knowledge economy. As previously established, the confluence of global events, including the underperformance of American public school students on international

indicators, the influence of neoliberalism on globalization, and historical factors such as “The great doubling,” created a catalyst of circumstances that resulted in the transmittance of standardized global policies on a worldwide scale. Yet, within the United States, there exists a persistent underperformance among American public school students which only confounds the prospects of adequately preparing all students for the knowledge economy. For example, recent National Assessment of Educational Progress (NAEP) results illustrate a multitude of structural circumstances that incur unequal opportunity for many American students along with insufficient preparation of a majority of students on a significant level. Examination of the data underscores a noteworthy difference in achievement as measured by family household income. NAEP science data indicate that students eligible for the National School Lunch Program (the demarcating point utilized to identify household income levels in relation to poverty) scored 137 scale score points in comparison to 164 scale score points for students whose families are not eligible for the National School Lunch Program (National Center for Educational Statistics, 2011). Furthermore, students, regardless of race, achieve at the basic or proficient level in significant percentages yet failed to achieve considerable results at the advanced level in science. The 2011 science scores specify that only 2% of students achieved at the advanced level (National Center for Educational Statistics, 2011). The inability of students to achieve at the advanced level in science demonstrates an inability on the part of American public schools to effectively prepare students to enter the knowledge economy. Outside of education, bifurcated opportunities and quality of life experiences await our students. National unemployment statistics illustrate an existence of an unemployment gap in which the unemployment rate for Whites is 6.8% in

comparison to 13.2% for African Americans (Bureau of Labor Statistics, 2013). Census Bureau data also confirms the existence of a racial gap in which Whites possess twenty-two times more wealth than African Americans (United States Census Bureau, 2010).

As the data indicate, the purpose of education holds great importance in determining the success and outcomes for individuals. The United Nations Millennium Goals, which include an emphasis on eradicating hunger and poverty along with universal primary education (<http://www.un.org/millenniumgoals/>), clearly illustrate the universal importance of education as a tool for social justice. In alignment with this heightened sense of collective urgency globalization exists as a force that produces distinct outcomes. One well documented byproduct of globalization is the emergence of an economy stratified by wage and skill. This stratified structure emerged as a global factor over time. Sanjek (1998) explains “The new jobs that appeared during the Reagan years came mainly in two varieties: high-skill, high-pay and low-skill, low pay,” (p. 124). A recent assessment of the current unbalanced economic scenario bears the description of Apple economy—a reference to Apple the electronics company. In the Apple economy several noticeable polarizing trends exists. To begin, the study found that the breakdown of Apple employees consisted of 13,920 workers in the United States and 27,250 workers abroad. More importantly, of these workers, the American workers earned approximately \$750 million in comparison to \$320 million by the foreign workers (Linden, Dedrick, & Kraemer, 2009). Within the United States a similar stratified disaggregation occurred among Apple’s high tech workers (i.e. engineers and professional staff) and the retail, support staff, freight and distribution workers, and nonprofessional workers. The 7,789 non-professional workers earned \$220 million while the 6,101 professional and

engineering workers earned more than \$525 million (Linden, Dedrick, & Kraemer, 2009). This point demonstrates the need for educational practices that equip students with the skills to access this economy, yet the point also applies a level of transparency that uncovers an issue of unfair income distribution.

The outcome of a society structured around a lopsided economy that distributes wealth in stark terms poses serious implications for education in general. The knowledge economy then hinges on knowledge and access to opportunities that adequately dispense this knowledge to all individuals within a society. Without the equal distribution of knowledge, the current structure only perpetuates the stratified status quo. Flecha (1999) succinctly connects the importance of education to economic opportunity, stating:

The prioritizing of intellectual resources in the information society means that cultural factors have great importance...As a consequence of the dual model of society, education...is becoming an increasingly important criterion for determining who joins which group. The educational curriculum, therefore, has become a factor in the process of social dualization, the selection of the fittest. (p. 66)

It's worth noting that the knowledge economy perpetuates itself because opportunity is perceived as limited, and in order to partake in this opportunity, one must strive for knowledge economy skills (i.e. 21st century skills). Thus, the economic structure which consists of high-skill, high-wage jobs and low-skill, low-wage jobs dictates that a path to personal success depends on an individual's ability to access 21st century instruction. However, the author is not arguing that 21st century skills, which include higher order thinking, authentic learning, and technology infusion, become a pejorative reference

point for globalization in general. Yet, because of this current knowledge economy structure, access to these skills in a meaningful manner now bears greater importance, especially in consideration that there exists only a limited number of high-skill, high-wage jobs.

These points matter because they illustrate the challenge of educating students equally but also highlight the importance of education over all. In order to ensure student success and simultaneously disrupt a structural system that perpetuates social stratification, teachers must educate students for a knowledge economy while also providing critical instruction. Basically, the teacher role in this linkage between school, knowledge economy, and human capital development must serve a dual purpose. Purpose number one is to ensure that students receive a 21st century education; after all, research points to a connection between globalization, 21st century education, and access to the knowledge economy. If schools and teachers do not adequately educate under privileged students, then the destiny of these students seems predetermined before they even enter the classroom. The second purpose of teachers within this linkage is that of critical pedagogy. Teachers as the point of interaction between student and curriculum possess the ability to interpret the curriculum so as to engage the student critically. Critical pedagogy in this manner represents the process of heightening a student's awareness in order to promote the critical questioning of a stratified social structure.

The outgrowth of 21st century instruction as a global byproduct brings into question education and the curriculum as a contested space. As Apple (2006) reminds us, "Education is a site of struggle and compromise. It serves as a proxy as well for larger battles over what our institutions should do, whom they should serve, and who should

make these decisions,” (p. 30). Additionally, in order to create an environment in which 21st century instruction possesses the ability to fully support all students in their endeavor to achieve both academic success and success in life, the curriculum and instructional techniques must be critically analyzed to ensure all students have access to opportunity. Apple describes the contemporary curriculum, which is based on the ideal of merit and hard work leading to success, as the “neutral curriculum.” Of course, the critique of this neutral curriculum faults it for privileging a knowledge-set for the masses that misses the needs of the ethnic groups and minorities whom actually comprise the totality of society. As Apple explains, “This construction of good education not only marginalizes the politics of knowledge but also offers little agency to students, teachers, and community members,” (p. 5). The process of discussing the findings of both research questions provides an opportunity to critically analyze the instructional delivery of 21st century skills by teachers within a context that determines whether or not space exists for personal agency.

After all, as critical theorists express, for students not of the majority racial and ethnic background, instilling individual agency within the classroom serves as a tool that possesses the ability to promulgate student success. The discussion of the findings represents an opportunity to demonstrate the ability of professors and classroom teachers to convey a curriculum in a manner that promotes agency for diverse students. Finally, the discussion in this chapter analyzes the results using a critical pedagogy analysis and concludes with recommendations for educators and policy makers.

Critical Pedagogy Analysis

Higher Education Setting

An analysis of higher education through a critical pedagogy lens seeks to diminish the negative outcomes of globalization in order to demonstrate the positive trends that emerged from the higher education component of this study. First of all, the following explanation of education's role within the perpetuation of social values must be explored in order to demonstrate the importance of education and also reveal the role of the professor or teacher as critical individual within the nexus of education that links together teacher and student. Giroux (1983) explains,

Reproduction refers here to texts [language and communication patterns] and social practices whose messages, inscribed within specific historical settings and social contexts, function primarily to legitimate the interests of the dominant social order. I want to argue that these can be characterized as texts, as social practices about pedagogy, and refer primarily to categories of meaning constructed so as to legitimize and reproduce interests expressed in dominant ideologies. p. 157

If education serves as a tool that potentially stratifies society, then the teacher as a critical component within the delivery of the curriculum possesses a key role as an interrupter to this stratifying process. The instructional practices of these individuals determine if space is allotted to develop the personal agency of the student.

A recurring theme of *globalization as competitiveness* surfaced from the higher education participant interviews. The document analysis at the state level defined the purpose of education as a function of preparation of individuals to compete globally.

However, this notion of global competition was not sustained at the micro level. In comparison with the definition of 21st century skills, as previously stated, the professor responses were inconsistent, yet demonstrated a notion that students should move beyond global competition and perhaps develop a sense of global cooperation. Professor definitions of globalization elicited a sense of awareness to culture and environment. In fact counter to the idea of globalization as competition the prospect of cooperation and awareness was evident in the Internationalization Committee summary document and professor responses. Perhaps the values of the higher education participants align more with pedagogy that promotes agency and empathy. One professor definition acknowledged the ideals of 21st century skills but seemed to couch his answers within a framework of oneness and collaboration. He was hesitant to accept 21st century education if it created a world in which the goal was to “outwit” your opponent. These ideals expressed by the higher education participants provide an opening for critical pedagogy designed to enlighten the students.

Critical pedagogy, as an instructional method, relies upon a process of liberating in tandem between instructor and student. In conjunction with this instructional approach, The Progressive Education World Model, as outlined by Spring (2009), promotes the following characteristics: “teacher professionalism and autonomy, learning based on students’ interests and participation, active learning, protection of local languages, education for ensuring social justice, and education for active participation in determining social and political change.” (p. 126). These instructional goals allow for critical pedagogy to occur that will enable education to serve as a tool of personal and political action. The higher education participants appeared to understand this progressive

education model and even used such words as “social justice,” in their answers. Through this process, the higher education participants demonstrate an ability to deconstruct globalization as a standardizing force that invalidates minority perspectives while also utilizing education as a tool to build opportunities for individuals to gain empathy for varied perspectives. The professors inherently infuse a sense of Freire’s conscientization into their educational perspective either deliberately or accidentally.

Public Middle School Setting

Within the classroom, a teacher has the power to interpret the curriculum and to implement the curriculum on a personal level. The curriculum exists as an exemplar or imprimatur of state policy in action, and as has been demonstrated, there exists a global influence on the design and purpose of this curriculum. Thus, the role for teachers within this framework, if the teachers will serve as proponents of critical pedagogy, is one of facilitator and validator—a deconstructor of the banking methodology of instruction. As Freire (1970) explains,

It follows logically from the banking notion of consciousness that the educator’s role is to regulate the way the world ‘enters into’ the students. The teacher’s task is to organize a process which already occurs spontaneously, to ‘fill’ the students by making deposits of information which he or she considers to constitute true knowledge. (p. 76)

Additionally, the banking theory rests on the idea that students serve as passive recipients of knowledge and that the teacher’s role within this process is to deposit knowledge. Of course, this theoretical framework elicits questions about knowledge and the inherent value conflicts that emerge from asking such questions. The evidence suggests a

standardizing and global impact on the curriculum, and teachers, as part of the curriculum delivery process, still serve an important role in effectively transmitting this curriculum. The teacher, if the individual is conscientized, can transform the curriculum in a manner that validates all students within the classroom, not just students of the dominant class.

The process of creating a classroom that promotes critical pedagogy incorporates the notion of equality. As Freire explains,

From the outset, her efforts must coincide with those of the students to engage in critical thinking and the quest for mutual humanization. His efforts must be imbued with a profound trust in people and their creative power. To achieve this, they must be partners of the students in their relations with them. (p. 75)

Contrary to the banking method, teachers, in many cases, must escape their middle class value system and seek first to understand the varied values of the students within the classroom. A notion of validation serves the purpose of emphasizing the importance of the individual's story and life within the classroom. The current educational trends, trends formed through the influence of globalization, emphasize 21st century skills within the classroom. 21st century skills, as they pertain to this study, include authentic learning, engaged learning, critical thinking, and technology infusion. Can teachers implement these skills in a manner that validates all students and transcends the typical banking model of education? An understanding of this question then allows for an understanding of the research question in general.

The findings from the teacher participant interviews demonstrate that the teacher participants recognize the value of differentiating instruction to meet the needs of diverse

student populations. Differentiating, in this use, operationalizes as understanding the current instructional needs of the students and then modifying instruction to ensure that the students achieve the prescribed benchmarks of the academic standards. In at least two responses, the teachers stated that they utilize instructional materials from diverse backgrounds to provide a cultural connection to their students. The interviews, however, stand in contrast to the observations, which perhaps revealed more information about critical pedagogy than did interviewing the teachers. In each classroom observation, the curriculum standards were evidenced. The objectives aligned with the curriculum and the instruction aligned with the objective. Yet in each teacher observation a reliance on the banking model of instruction prevailed. The teacher provided knowledge, and the students absorbed the knowledge. This point is not meant to undercut the noble endeavors of the teachers because for each participant it was apparent that they held high expectations for the students. However, a reliance on the banking instructional method presents itself as an obstacle to critical pedagogy.

Ultimately, the teacher observations indicated that the teachers subscribed to a traditional form of education methodology. Thus it brings into question their role as critical pedagogy agents. While the classrooms were organized to promote student success at mastering the topics, the reliance on a banking method sustains the traditional teacher-student relationship—a relationship to knowledge that perpetuates an understanding of knowledge as factual and static. Of course, teachers are products of their environment, and in this 21st century environment, the recent implementation of Common Core Standards dominates the curriculum. An emphasis on mastering Common Core Standards persists and overshadows current educational practice. Moreover, it must

be noted that the teachers who participated in this study demonstrated a commitment to their students. Thus a possible relationship exists between student success and mastery of the Common Core Standards at all costs, which tends to eliminate the role of the individual and instead preference the role of the curriculum—a perspective that aligns with Apple’s concept of a “neutral curriculum.” Teachers, driven by success as measured through student performance and teacher evaluation performance standards, adhere to the curriculum because it defines the environment in which they exist. Conscientization of the students is not built into the curriculum, and thus relies on the individual motivation of the teacher to instill this value within the student. Yet, because of the preeminence placed on the curriculum and teacher evaluation rubric standards, little space exists for teachers to devote time to conscientization.

However, given this framework, the teachers adapted instruction to meet the needs of their students. As profiled, these teachers work in an urban district that consists of a diverse population. Even if the curriculum remains static and serves as a driving force, the teachers must apply instructional methods that accommodate the needs of their students. In the case of the participants profiled, it’s clear that the teachers applied instruction designed to promote the success of all students. For example, the classrooms were highly organized—learning objectives were clearly posted and instruction was aligned to the objectives—traits that support the academic needs of urban students. Perhaps one underlying design that occurs from this instructional approach is that of subverting the system from within. The current educational and economic construct mandates that students successfully master 21st century skills in order to access the knowledge economy. What use does it serve these students to deny them these skills?

One approach to promote an egalitarian society hinges on equalizing opportunity for all students to participate in the structure of the society.

Implications for Educators

The recommendations for policy makers and educators operate on a dual agenda. Agenda number one promotes success via adherence to the current globalized path. In order to undermine the system, one must first be part of the system. Agenda number two outlines a more critical perspective designed to promote the individualized needs of our students who currently reside in a diverse world. The reason behind this dual recommendation is simple, if students cannot escape their environmental confines, then they must learn how to achieve success within this particular realm. Consider for example the current teacher preparation landscape. In Crown City, USA, THU, one of the largest producers of teachers in this Southeastern state, now faces competition from other credentialing agencies, including Teach for America (TFA) and Teach Crown City (pseudonym), which is affiliated with a larger national agency. Future and potential teachers may choose from various credentialing pathways, meaning that in spite of THU's dominant role in the teacher supply line this institution does not monopolize the new teacher market. In this context, it seems that if THU wants to maintain its status as a leading teacher preparation institution, it must acknowledge the pressure exerted on it by other credentialing agencies. If THU does not provide teacher preparation instruction fully aligned with the current 21st century market, then future teachers may choose other alternatives.

As the research indicated, inconsistencies existed within the higher education participants about their understanding of 21st century skills. Additionally, the participants

lacked clarity or mastery knowledge of the teacher evaluation tool utilized to evaluate teachers in the profession. In particular, this point is important because the current teacher evaluation tool is laden with references to and expectations of 21st century instruction. Essentially, the teacher evaluation tool mandates that teachers provide 21st century instruction in the classroom. Therefore, one recommendation, which albeit is the product of standardization, includes a requirement that all professors at THU receive in-service training on this evaluation tool. Additionally, professors, to some extent, should be required to align their classroom instruction to this evaluation tool. If the role of an education professor is to prepare future teachers to succeed in the classroom, then alignment to the tool by which teachers are evaluated seems paramount. While this approach would result in a more homogeneous educational focus and perhaps challenge some professors who feel aligned to the uniqueness of the courses they teach, a more structured and streamlined product may ultimately produce more effective graduates.

Simultaneously, education professors must also strive to provide teachers with more critical pedagogy skills so that they can adequately meet the needs of all students in the classroom. Keep in mind that THU operates within a Southeastern, urban environment that consists of a diverse demographic—racially, ethnically, and economically. THU teachers will, in many cases, teach in the Crown City School District—a diverse, urban educational setting. Success for these teachers and their students rests on their knowledge of critical pedagogy. Yet, as the evidence suggests, while the teachers may understand the value of relationships and holding their students to high standards, their instructional practices still rely on traditional banking methods. For teachers to provide critically conscious instruction that creates space for individuals

within the constant daily churn of the curriculum, students of all backgrounds must feel a sense of purpose within the classroom, and teachers have the opportunity to lead the classroom in this direction. It should be noted that the Crown City School District appears to recognize the importance of critical pedagogy. Recently the central office, through the direction of the new superintendant, has embarked on educating staff members on the topic of cultural competence. To begin a dialogue about the significance of culture competence within the classroom represents an important step in creating critically conscious teachers. Clearly the Crown City School District understands that teachers must be trained to recognize the value and values of all students and thus incorporate these differentiated values into the classroom culture at large.

In addition, the teachers need more direct training on the concept of 21st century skills. At the school level, professional development should be offered that first operationalizes 21st century instruction and second explains what 21st century instruction in practice looks like. Based on the interviews and observations of teachers, the evidence suggests that teachers consider 21st century instruction to equate to “good teaching”, yet the implementation of this “good teaching” is inconsistent and not always aligned with the actual definition of 21st century instruction. If schools provide clear professional development in this area in coordination with critical pedagogy skills, it seems that the academic outcomes for all students would ensure successful results.

At the national level, and continuing with the recommendation for enhanced professional development in the area of 21st century instruction, policy makers must press for an alignment of the Common Core Standards with teacher evaluation tools. The teacher evaluation tool represents a system of evaluation that naturally guides teacher

practice, particularly in an era of increased accountability and pay for performance. Essentially, a teacher's professional livelihood and tenure status connect to the evaluations they receive throughout the school year. Additionally, performance of the students as measured by their mastery of the Common Core Standards also reflects the quality of teacher instruction. Thus the Common Core Standards and teacher evaluation tool must clearly define 21st century skills, and this definition must align between the two entities. This alignment process will produce an instructional/classroom outcome—consistent implementation of 21st century instruction in the classroom. More importantly, this recommendation ensures the equitable delivery of 21st century instruction in urban, rural, and suburban schools. If the imperative hinges on developing human capital, then policy makers must ensure that a consistent educational product is delivered to all students.

Finally, as part of the data analysis, a 21st century rubric was originally utilized to assess the level of 21st century instruction present in the classroom participant observations. The rubric relied on assessing higher order thinking, engaged learning, authentic instruction, and technology infusion as a measure of globalization's impact on education. However, the current rubric requires a modification so that it aligns with two key components that emerged from the findings of this study. Two additional 21st century skills must be added to the modified rubric: cultural relevance and critically conscious instruction. These two additional 21st century skills emerged from analysis of the findings and apply critical instructional tools so that future classroom observers may adequately assess the ability of instruction to serve the needs of diverse students. Thus, the recommended changes dictate creating a new rubric titled: Culturally Relevant 21st

Century Analysis Rubric (Appendix E). The modified rubric incorporates Cultural Relevance, which is “. . . a pedagogy that empowers students intellectually, socially, emotionally, and politically by using cultural referents to impart knowledge, skills, and attitudes,” (Ladson-Billings, 1994, p. 17). The second change to the rubric requires the incorporation of Critically Conscious Instruction, which borrows its definition from Freire. Freire (1970) explains,

They must abandon the educational goal of deposit-making and replace it with the posing of the problems of human beings in their relations with the world. “Problem-posing” education, responding to the essence of consciousness—intentionality—rejects communiqués and embodies communication. It epitomizes the special characteristic of consciousness: being conscious of, not only as intent on objects but as turned in upon itself in a Jasperian “split”—consciousness as consciousness of consciousness. (p. 79)

It is this focus on elevating consciousness as a function of pedagogy that informs the concept of critically conscious instruction. The role of the teacher in this method of instruction is to enlighten the student, not just to impart predetermined sets of knowledge. Finally, this modified rubric aligns with concepts that emerged from the data analysis, and it also provides researchers with a tool to utilize in the process of evaluating contemporary classroom instruction in the diverse setting of American public schools.

Recommendations for Future Research

Because of the natural limitations inherent in this study, which include issues surrounding sample size and study duration, this research study exists as a starting point

for future research on this topic. It is suggested that future research on this topic incorporate multiple observations of the participants in order to fully assess the instructional methods of the teachers over time. The observations utilized in this study merely represent a window of insight into the instructional delivery of the participants. Additionally, increasing the sample size will possibly produce more generalizable results. However, in spite of these limitations, this research study represents a reference point for the process of assessing the impact of globalization on education at the classroom level. Future research on this topic must incorporate comparative aspects in order to assess whether or not educators in other nations confront the same circumstances as do educators in the United States. Finally, it is worth considering if instructional practices have actually changed over time. The focus of this study emphasized 21st century instruction. Yet as evidence suggested, 21st century is a key word in contemporary education that has not been operationalized. Perhaps what we are witnessing is the impact of a term without actually experiencing an actual, realistic change in instructional practices. While educators have adapted this term to their vernacular, have their instructional practices actually changed? Thus, a longitudinal study exploring classroom instruction in a pre-21st century classroom compared to education in a modern 21st century classroom is warranted. A study of this nature would clearly delineate whether or not current instructional practices truly illustrate the foundation of a rejuvenated 21st century classroom.

Summary

Through this study, it has been demonstrated that globalization effects education at both the higher education realm through the Global Vision Tomorrow Initiative as well

as at the middle school classroom level due to the integration of 21st century instructional skills. However, as evidence throughout this study indicated, the interpretation of and implementation of 21st century instruction varies on an individual basis. It almost appears that 21st century instruction exists within the eye of the beholder, and as an instructional imperative, resembles what one teacher characterized as “good teaching,” even if “good teaching” itself varies on a case by case basis. What this study demonstrates is a need for greater clarity on the concept of 21st century instruction at both the higher education level and the public middle school level. Additionally, while this clarity may not necessarily translate into 21st century instruction implemented with complete fidelity in the classroom, it will bring alignment between education policies and the resultant product.

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APPENDIX A: PROFESSOR INTERVIEW PROTOCOL

Goal of the Study:

I want to understand how professors at Till Height University School of Education prepare pre-service teachers to provide public education students a 21st century education.

Type/Focus of Question	Question
Background	What subjects/specialty do you teach at THU?
Background	What level of student do you teach?
Introductory	Describe your role on the Internationalization Committee? Or in helping to internationalize the School of Education?
Background	How do you conceptualize the function and purpose of that committee?
Curriculum	How do you infuse the focus/purpose of the Internationalization Committee into your instruction?
Theoretical	How do you conceptualize globalization?
Curriculum	Do you see a connection between globalization and the Internationalization Committee?

Curriculum	How does globalization infuse your daily instruction?
Curriculum	How does globalization infuse the overall structure of your course and course design?
Curriculum	How do you view your role as an education professor within the framework of preparing students for 21 st century outcomes?
Curriculum	How does the concept of globalization surface in your classroom? What does it look like? How do you teach these concepts?
Curriculum	How do you conceptualize 21 st century skills? How do you prepare pre-service teachers to teach 21 st century skills in the classroom?
Curriculum	How do you assess your effectiveness at teaching/preparing future teachers to teach 21 st century instruction in the classroom?

APPENDIX B: MIDDLE SCHOOL TEACHER INTERVIEW PROTOCOL

Goal of the Study:

I want to understand how teachers who graduated from Till Height University School of Education effectively deliver global instruction as defined by teaching 21st century skills.

Type/Focus of Question	Question
Background	How would you describe your school?
Introductory	Tell me about your role as a teacher in this school? What grade do you teach? What subject(s) do you teach?
Background	What are the school level expectations for students in your classes?
Background	How does the administration in your school establish a focus on academic expectations? How would you describe the administrative academic expectation?
Curriculum	What are your overall academic expectations and endeavors for students in your classroom?

Background	Tell me how the courses you took at Till Height University infuse your role as a middle school teacher?
Curriculum	How do you conceptualize globalization?
Curriculum	How do you define 21 st century learning skills?
Curriculum	How do you provide students with 21 st century learning skills?
Curriculum	How often do you provide exposure to these skills?
Curriculum	How do you assess these skills? How do you know if students successfully attained these skills?
Curriculum	What is your understanding of 21 st century learning skills in relation to the teacher evaluation rubric?
Curriculum	How does the administration at the school emphasize 21 st century learning skills?

Curriculum	How do you provide higher order thinking in the classroom?
Curriculum	How do you provide authentic learning in the classroom?
Curriculum	How do you provide engaged learning in the classroom?
Curriculum	How do you infuse your instruction with technology?
Curriculum/Diversity	How do you adjust your 21 st century instruction to meet the demands of different demographics of students? In other words, do you teach 21 st century skills differently for low performing students, high performing students, African-American students, LEP students, White students, EC students?

APPENDIX C: 21ST CENTURY SKILLS ANALYSIS RUBRIC

Adapted from Moersch (2011)

Goal of the Study:

I want to measure the effectiveness of teachers teaching 21st century skills in the classroom. This rubric will be utilized to evaluate the participant observation data and lesson plan data.

21 st century skill	Measurable/Observable Outcome	Score
<p>Higher Order Thinking: “Higher order thinking references the level of student cognition based on Bloom’s taxonomy,” (Moersch, 2011, p. 44). This study will utilize Blooms Revised Taxonomy.</p>	<p>Student takes notes only; no questions asked (score 0)</p> <p>Remembering level instruction (score 1)</p> <p>Understanding level instruction (score 2)</p> <p>Applying level instruction (score 3)</p> <p>Analyzing level instruction (score 4)</p> <p>Evaluating/Creating level of instruction (score 5)</p>	
<p>Authentic Learning: “. . . students applying their learning to real-world situations,” (Moersch, 2011, p. 45).</p>	<p>The learning experience is missing or too vague to determine relevance (score 0)</p> <p>The learning experience represents a group of connected activity, but provides no real-world application (score 1)</p> <p>The learning experience provides limited real-world relevance, but does not apply the learning to a real-world situation (score 2)</p> <p>The learning experience provides extensive real-world relevance, but does not apply the learning to a real-world situation (score 3)</p> <p>The learning experience provides real-world</p>	

	<p>relevance and opportunity for students to apply their learning to a real-world situation (score 4)</p> <p>The learning experience is directly relevant to students and involves creating a product that has a purpose beyond the classroom that directly impacts the students (score 5)</p>	
<p>Engaged Learning: “. . . represents(1) the amount of complex thinking (e.g. problem-solving, decision making, experimental inquiry, inductive-deductive reasoning and (2) the degree of self directed learning occurring by students,” (Moersch, 2011, p. 44).</p>	<p>Students report what they have learned only (score 0)</p> <p>Students report what they have learned only, collaborate with others (score 1)</p> <p>Students given options to solve a problem (score 2)</p> <p>Students given options to solve a problem, collaboration with others (score 3)</p> <p>Students help define the task, the process, and the solution (score 4)</p> <p>Students help define the task, the process, and the solution; collaboration extends beyond the classroom (score 5)</p>	
<p>Technology Integration: “Technology use involves the critical use of digital tools and resources to extend or expand the effectiveness and efficiency of student learning,” (Moersch, 2011, p. 45).</p>	<p>No technology use is evident (score 0)</p> <p>Technology use is unrelated to the task (score 1)</p> <p>Technology use appears to be an add-on and is not needed for task completion (score 2)</p> <p>Technology use is somewhat connected to task completion involving one or more applications (score 3)</p> <p>Technology use is directly connected to task completion involving one or more applications (score 4)</p> <p>Technology use is directly connected and</p>	

	needed for task completion, and students determine which application(s) would best address their needs (score 5)	
Total Score		

APPENDIX D: RESEARCH DESIGN FLOW CHART

Title: Globalization and Education: 21ST Century Instructional Practices for Urban Teachers

Phase One: Higher Ed

Research Question One: Based on the vision of GLOBAL VISION Tomorrow, how has the Till Height University College of Education prepared pre-service teachers to provide public education students a 21st century education?

Interview staff members at Till Height University to determine the manner in which globalization has been infused into the education program at Till Height University.

Phase Two: Middle School Setting

Research Question Two: How do THU graduates effectively deliver global instruction as defined by 21st century skills?

Examine the impact of globalization at the middle school level. This is a process which involves interviewing and observing middle school teachers who recently graduated from the Till Height University School of Education.

In order to measure the global impact on the students, a framework of 21st century learning skills will be constructed. The 21st century skills include higher order thinking (i.e. critical thinking and problem solving), communication, authentic learning, and technology integration. The research will evaluate the level of exposure that each group has to these experiences and the level of comprehension or understanding that each group attains with these skills.

APPENDIX E: CULTURALLY RELEVANT 21ST CENTURY ANALYSIS RUBRIC

Adapted from Moersch (2011) and modified to include Cultural Relevance and Critically Conscious Instruction

21st century skill	Measurable/Observable Outcome	Score
<p><i>Higher Order Thinking:</i> “Higher order thinking references the level of student cognition based on Bloom’s taxonomy,” (Moersch, 2011, p. 44). This study will utilize Blooms Revised Taxonomy.</p>	<p>Student takes notes only; no questions asked (score 0)</p> <p>Remembering level instruction (score 1)</p> <p>Understanding level instruction (score 2)</p> <p>Applying level instruction (score 3)</p> <p>Analyzing level instruction (score 4)</p> <p>Evaluating/Creating level of instruction (score 5)</p>	
<p><i>Authentic Learning:</i> “. . . students applying their learning to real-world situations,” (Moersch, 2011, p. 45).</p>	<p>The learning experience is missing or too vague to determine relevance (score 0)</p> <p>The learning experience represents a group of connected activity, but provides no real-world application (score 1)</p> <p>The learning experience provides limited real-world relevance, but does not apply the learning to a real-world situation (score 2)</p> <p>The learning experience provides extensive real-world relevance, but does not apply the learning to a real-world situation (score 3)</p> <p>The learning experience provides real-world relevance and opportunity for students to apply their learning to a real-world situation (score 4)</p> <p>The learning experience is directly relevant to students and involves creating a product that has a purpose beyond the classroom that</p>	

	directly impacts the students (score 5)	
Engaged Learning: “. . . represents(1) the amount of complex thinking (e.g. problem-solving, decision making, experimental inquiry, inductive-deductive reasoning and (2) the degree of self directed learning occurring by students,” (Moersch, 2011, p. 44).	<p>Students report what they have learned only (score 0)</p> <p>Students report what they have learned only, collaborate with others (score 1)</p> <p>Students given options to solve a problem (score 2)</p> <p>Students given options to solve a problem, collaboration with others (score 3)</p> <p>Students help define the task, the process, and the solution (score 4)</p> <p>Students help define the task, the process, and the solution; collaboration extends beyond the classroom (score 5)</p>	
Technology Integration: “Technology use involves the critical use of digital tools and resources to extend or expand the effectiveness and efficiency of student learning,” (Moersch, 2011, p. 45).	<p>No technology use is evident (score 0)</p> <p>Technology use is unrelated to the task (score 1)</p> <p>Technology use appears to be an add-on and is not needed for task completion (score 2)</p> <p>Technology use is somewhat connected to task completion involving one or more applications (score 3)</p> <p>Technology use is directly connected to task completion involving one or more applications (score 4)</p> <p>Technology use is directly connected and needed for task completion, and students determine which application(s) would best address their needs (score 5)</p>	
Cultural Relevance: “. . . a pedagogy that empowers students	<p>No cultural relevance (score 0)</p> <p>Limited, culturally relevant materials (score 1)</p>	

<p>intellectually, socially, emotionally, and politically by using cultural referents to impart knowledge, skills, and attitudes,” (Ladson-Billings, 1994, p. 17).</p>	<p>Relevant pedagogy and material utilized but not coherent with the lesson (score 2)</p> <p>Relevant pedagogy and material aligned with students’ intellectual, social, and emotional needs but student impact unclear (score 3)</p> <p>Relevant pedagogy and material aligned with student instructional needs and student awareness and impact present (score 4)</p> <p>Relevant pedagogy and material aligned with student that produces student empowerment (score 5)</p>	
<p><i>Critically Conscious Instruction:</i> “They must abandon the educational goal of deposit-making and replace it with the posing of the problems of human beings in their relations with the world. “Problem-posing” education, responding to the essence of consciousness— intentionality—rejects communiqués and embodies communication. It epitomizes the special characteristic of consciousness: being conscious of, not only as intent on objects but as turned in upon itself in a Jasperian “split”— consciousness as consciousness of consciousness,” (Freire, 1970, p. 79).</p>	<p>No critically conscious instruction; strict reliance on banking method (score 0)</p> <p>Limited questioning of knowledge; continued reliance on banking method (score 1)</p> <p>Critical questioning of material present; no formal or informal assessment to determine presence of critical consciousness (score 2)</p> <p>Critical questioning present; student and teacher work in collaboration; students equipped with strategies to question knowledge; limited assessment strategies present to determine critical consciousness (score 3)</p> <p>Critical questioning present; student and teacher work in collaboration; students equipped with strategies to question knowledge; effective assessment strategies present to determine critical consciousness (score 4)</p> <p>Critical questioning present; student and teacher work in collaboration; students equipped with critical conscious strategies; students transfer critical consciousness to multiple settings and contents; effective assessment strategies present to determine critical consciousness (score 5)</p>	

Total Score		
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