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TEACHING FOR GLOBAL LEARNING THROUGH TELECOLLABORATION:
A CASE STUDY OF K-12 EDUCATORS' CONCEPTUALIZATIONS AND
PRACTICES ABOUT GLOBAL EDUCATION

by

Holly Gooding Oran

A Dissertation

Presented in Partial Fulfillment of Requirements for the

Degree of

Doctor of Education

In

Teacher Leadership for Learning

In the

Bagwell College of Education

Kennesaw State University

Kennesaw, GA

2011

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A Case Study of K-12 Educators'
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DATE

DEDICATION

To Cenk, without whose love, support, and dedication none of this would have been possible – Seni seviyorum.

To Serkan Dylan and Alara Jane, who inspire me to be a better parent first, and educator second. Never forget that you must be the change.

And to my students, past, present, and future.

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Finally, I am writing this today because of the support and love of my family. My children, Serkan and Alara, and my husband, Cenk, have always been there to help, support, comfort, and love me. This dissertation belongs to all of us.

ABSTRACT

TEACHING FOR GLOBAL LEARNING THROUGH TELECOLLABORATION: A CASE STUDY OF K-12 EDUCATORS' CONCEPTUALIZATIONS AND PRACTICES ABOUT GLOBAL EDUCATION

by

Holly Gooding Oran

A plethora of literature discusses the flattening of the world we live in (Friedman, 2007) and the need for teachers to educate K-12 students for global learning. However, the literature is critically lacking in empirical evidence in how this is to take place in classrooms. In addition, existing empirical studies have focused primarily on American social studies educators at the secondary school level. Scholars differ in their own understanding of what global education means and should look like in schools, how teachers are to incorporate it into their curriculum, and how it benefits K-12 learners. The purpose of the present qualitative case study was to explore how non-social studies K-12 educators in the United States and abroad conceptualize global education, how they teach for global learning, and how they make decisions regarding pedagogy and curricula when teaching for global learning.

The participants were a purposeful sampling of six teachers engaged in telecollaborative projects through the website the International Education and Resource Network (iEARN), with the sample being chosen to maximize diversity of participants and their students. Data were collected through questionnaires, semi-structured interviews, message exchanges, blog postings, document analysis, and reflective memos.

Findings indicated that participants framed their conceptualizations of global education around their own experiences and values and around students' needs and experiences. In addition, they lacked formal preparation to teach for global learning, and stressed the importance of Information and Communication Technology (ICT) in global learning. Participants also identified factors which facilitated and hindered the process when teaching for global learning. Finally, participants integrated global education into their classrooms because of their personal commitment to it, and in spite of a lack of formal curriculum. These findings are interpreted within the context of Hicks' (2003b, 2007b) four-fold framework for global education.

The present study builds on existing lines of inquiry by adding to the knowledge base, as it explores the ways in which teachers in fields other than social studies, lacking a global education curriculum, at all grade levels K-12, and in both the US and abroad, conceptualize global education, how they teach for global learning, and how they make decisions in teaching for global learning.

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TEACHING FOR GLOBAL LEARNING THROUGH TELECOLLABORATION:
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CHAPTER 1: INTRODUCTION

Statement of the Problem

Students are busily working in cooperative groups in a suburban fifth grade language arts classroom in the Southeastern United States. They are engaged in researching and creating projects to share with their partner classrooms around the world. At the interactive white board, four boys discuss celebrations unique to their local community as they decide which to incorporate into their PowerPoint presentation. At a computer near the window, a student responds to blog postings from partners on the other side of the United States. In the back of the room, a group shares notes on Slovenia that they have gathered doing online research, chooses the information they find most interesting and important, and creates a mobile to represent that country. Finally, a group in the front puts finishing touches on holiday cards that will be mailed to Australia. The handmade cards have scenes of both snowmen and beaches as the students illustrate celebrations in both hemispheres; they also work on letters in response to their Australian partners' questions and comments.

These students are engaged in year-long projects using Information and Communication Technologies (ICTs) focusing on global learning. Gardner (2008) points out that the world of the future will demand capacities that, until now, have been options,

and that we must begin to cultivate these options now. Among the capacities he discusses is the ability to respect and understand different individuals and to communicate effectively with them. He argues that in the interconnected world we now live in, intolerance and disrespect are no longer options, and collaboration is critical. Similarly, Merryfield (2000) states that the increasing diversity and inequity within the United States along with the globalization of the world's economic, political, technological, and environmental systems have forever changed the knowledge and skills young people need to become effective citizens. She adds that "...our future rests upon the abilities of young people to interact effectively with people different from themselves and take action in transforming structures of local and global oppression and inequity into ones that can bring about social and economic justice" (p. 429).

Pilot Study

Throughout the 2009-2010 school year I engaged in a pilot study in order to determine how the use of telecollaborative projects would influence my fifth grade students' literacy skills and global awareness and perspectives. I conducted this study within my own classroom, and my students made up a convenience sample. I worked with the students on two learning circle projects and a holiday card exchange all organized through the website International Education and Resource Network (iEARN). Learning circles involved approximately eight schools from around the world working telecollaboratively on writing and social studies projects. In holiday card exchanges, my class exchanged handmade holiday greeting cards with about ten other schools in the US and around the world. Although these cards were sent through the postal service, the

students also used ICT to learn more about the countries and cities in which our partner schools were located.

After completing these projects, students responded to a teacher created blog question that asked what they learned from our collaborative work. Many stated that they enjoyed learning about the other students. For example, one male student, Edward, wrote, “It was fun to learn what kids all over the world enjoy.” Another student, Paul added, “I like learning what kids our age do [and] like all over the place” (H. Oran, personal communication, November 8, 2009).

In focus group interviews of the students, they described what they would like to find out about our international partners. They wanted to know about the partners’ daily lives, clothes, music, and hobbies, but were especially interested in learning about international children’s school lives. One female student, Faith, wanted to “figure out if... they have the same learning styles. Like... if they do things with their hands... go outside and... if they are learning about nature” (H. Oran, personal communication, November 16, 2009). Another student, Nathan, wanted to know about school hours in other countries, and Marina commented that she knew that students in Japan had a longer school day. The students were very excited by the prospect of using Information and Communication Technology (ICT) videoconferencing to personally speak to and view their partners. While making holiday cards, the students showed genuine curiosity and asked numerous questions about the students and the countries to which we were sending the cards. It was important to the children that their cards be authentic and personalized for the recipients.

The most common response from students when asked what they had learned or discovered from this project was how surprised they were by the similarities between themselves and their global partners. In their blog entries, students repeated this theme over and over. A male student, Jerrod, wrote, “I learned that culture and likes in general are very different in other countries, but some things are the same.” Another student, Tracy, added, “These kids like most of the things I like: tea, football, and more!” Perhaps Janna summed it up best when she explained, “I figured out that no matter how different they might seem, they’re really just kids just like us. They like the same things so why would we think they’re different when they’re not” (H. Oran, personal communication, November 13, 2009)?

These students demonstrated interest in learning more about the world and its people. Zong (2009) points out that in an interconnected world it is our ability to work effectively with other people and nations on issues that cross international borders that will ensure our very survival and well-being. Tapio Varis (2002), the UNESCO chair of Global e-learning, highlighted the importance of global literacy, that is, “the understanding of the interdependence of people all over the world and the ability to participate in global interactions and collaborations (cited in McPherson et al., 2007, p. 24). Therefore, it is imperative that American students have opportunities to gain knowledge about the world they live in, and to develop the kinds of interpersonal relationships that will help them to appreciate diversity, develop cultural awareness, and reduce stereotypes (Abbott, Austin, Mulkeen & Metcalfe, 2004; Carano & Berson, 2007; Glimps & Ford, 2008).

The use of ICT in conducting global learning projects helped students to examine their preconceptions and attitudes towards their global peers and realize that they had many more commonalities than differences. Glimps and Ford (2008) discuss the value of ICTs and collaborative learning projects in helping students value and respect one another as individuals and as members of culturally distinct groups. While exploring the diversity of the world with ICTs, students form friendships and discover that humans are quite similar in spite of cultural differences (Glimps & Ford, 2008).

Purpose of Study and Research Questions

The past decade has seen a resurgence of literature emphasizing the need for global learning among K-12 students in order to prepare them for the interconnected world of the 21st Century (Adams, 2008; Carano & Berson, 2007; Davies, 2006; Merryfield, 2004; Serf, 2010). However, researchers point out the critical lack of empirical evidence demonstrating that global learning is taking place in schools, or describing ways in which teachers can teach for global understanding (Gaudelli, 2003; Merryfield, 2000; Zong, Wilson, & Quashiga, 2008). Additionally, many of the existing studies predate the world changing events of September 11, 2001, after which US foreign policy led to increased hostility and estranged relationships with former allies like Turkey and Jordan (Gaudelli & Heilman, 2009). Fewer studies still have been conducted in American elementary settings, which have suffered from the narrowing of the curriculum following the implementation of No Child Left Behind and an ever-increasing emphasis on “the basics” of literacy and mathematics to the exclusion of social studies, science, and the arts (Gaudelli, 2003). Little is known about how teachers who do encourage global learning make decisions and implement their programs and teachers lack

straightforward curricular guidance in teaching for global learning (Rapoport, 2009). Cummins and Sayers (1997) assert that in order to prepare students for the 21st Century, schools must "...include developing students' capacity and commitment to collaborate across cultural and linguistic boundaries in pursuing joint projects and resolving common problems" (p. 15).

Merryfield (1998) discussed the perspectives of social studies teachers with varying levels of experience as they taught for global perspectives, and concluded by emphasizing that the conceptual literature on global education could be strengthened by the addition of teacher voices. She called specifically for empirical research aimed at better understanding how teachers conceptualize global education as they plan and teach, and what contextual factors influence teachers' instructional decisions as they teach about the world and its peoples. This research will begin to address these issues. The purpose of this study was to examine how telecollaborative global learning projects are used by teachers both in the United States and abroad to develop global understanding among schoolchildren and promote global citizenship. In his framework for global education, Hicks (2003b) espouses four dimensions of global education which he describes as the minimum for any global education initiative (p. 270). These four dimensions include the issues dimension, which embraces five major problem areas and solutions to them, the spatial dimension, which explores local and global connections, the temporal dimension, which emphasizes explorations of interconnections between the past, present, and future, and the process dimension, which emphasizes participatory and experiential pedagogy (p. 271). Using Hicks' framework as my lens, I developed the following questions for the present qualitative case study:

1. How do K-12 educators who engage in telecollaborative learning projects conceptualize global education?
2. How do these K-12 educators teach for global learning?
3. How do these K-12 educators make decisions about pedagogy and curricula when teaching for global learning?

Significance of the Study

In explaining the need for global education programs, Serf (2010) stated that global learning is imperative for students entering the 21st Century, and that it is “about meeting the educational needs of those growing up in an increasingly globalised society; for example, helping them see themselves as global citizens; helping them to have a deeper understanding of interdependence; and providing opportunities to participate fully in their education” (p. 242).

Skelton (2010) described the term global learning as one which is seemingly meaningful yet which lends itself to great discussion and varying interpretations at the same time. To some, he stated, it means learning about other countries and cultures, while to others, it is interconnected to economic success of both countries and workers. To yet more, it relates to other issues such as environmental problem solving and peace studies. Nevertheless, Skelton added, “Whatever it is or isn’t, and however it is used or misused, the heart of global learning is an increasingly deeper appreciation of and interaction with ‘the other’” (p. 39). Therefore, he concluded, the work of schools must be to begin at the youngest ages to build the capacity of students to work with and become aware of the perspectives of others, and that teachers must work to steadily broaden the context of

these perspectives from local to global. In this way, he concluded, economics, peace studies, community cohesion, and the environment will benefit.

Stewart (2008) added that the Asia Society's research in determining annual winners of the Goldman Sachs Prizes for Excellence in Education has indicated that schools typically begin to focus on global education in a small way and gradually broaden their approaches. She added that over time, globally oriented schools developed key common elements. Among these elements were a global vision and culture which were reflected in school mission statements, the development of an internationally minded faculty through recruitment and professional learning, the infusion of global content into all subject areas, student experiences with collaborative projects, and the use of technology to tap resources and facilitate collaborations.

On September 12, 2001, Hicks (2007a) was charged with speaking about his global framework to a group of new education students. He states that he was at a loss for what to say given the events in the US on the previous day. He told them:

As you will be only too well aware the world is both a good place and a bad place. This will also be true of your own communities and the schools you are about to teach in. One of the key tasks for you as a teacher is to find a way of being present to that tension, both in your own life and those of your pupils. (2007a, p. 4)

Hicks (2007a) went on to add that education has a central role to play in helping create citizens who can think and act globally as well as locally, and that at its core this task asks "young people to understand their interconnectedness to others and how we help them make sense of the human condition" (2007a, p. 4). In order for students to fully

understand life in the world today and to play a role in it, they must understand their position within in and the implications their actions have in the wider global context. What happens in the world continually affects our daily lives whether it is in music, fashion, crime, or weather conditions, and whether we are in Rome, Georgia or Rome, Italy. Education for the 21st Century must look not only at the nature of a problem but also at possible solutions, and must provide students with the tools to effect change. “Not to do so would be an educational crime for the result is to disempower pupils (surely not one of our learning outcomes) rather than empowering them to take part in responsible action for change” (Hicks, 2003a, p. 4).

Throughout my teaching and educational careers, I have had the good fortune to travel and teach in a wide variety of educational settings both within the United States and abroad. My experiences have shaped my philosophy of education greatly. These experiences have all contributed collectively to my educational philosophy and pedagogical beliefs. Among these experiences have been the opportunities to work with and in international settings, and these have led me to a personal focus on global learning. Although I am responsible for my students’ mastery of standards and curricula, I feel very strongly that I must prepare them for a future in which they will engage with people from all over the world. As educators, we can promote global understanding by teaching K-12 students about global learning. Students must develop an understanding of the world and their place in it, and appreciate the interconnectedness of the world they live in. They need to know that their actions do not affect merely themselves or their communities, but the world, and therefore they have a responsibility to critically think about the actions of themselves and others.

It is imperative that researchers and educators examine better ways to teach global mindedness to schoolchildren. This research must take place at all grade levels, in all subject areas, and in classrooms that represent the world community. The task of global education can no longer be exclusively that of a high school social studies teacher. Instead, global learning must be the framework within which all curriculum and pedagogy are delivered beginning at the earliest grade levels. Children must develop knowledge along with habits of heart and mind that will help them develop into critical thinkers who will contribute positively to the world in which they live.

The present research is a first step in understanding how educators are to accomplish these goals. It examines the global conceptualizations, teaching practices, and decision making processes of global educators who are outside of the traditional model. These educators are not secondary social studies teachers. Instead, they represent other fields of education at all grade levels. They do not have a formal curriculum for teaching global education. Instead, they find ways to integrate global learning into their existing curricula. Finally, they do not represent a few regions of the US. Instead, they represent the pedagogy and perspectives of the world community.

Merryfield (1998) discussed the considerable overlap between global education theory and practice, and emphasized the need to listen to teachers' voices in developing global education practice. In his work with schools in New Jersey, Gaudelli (2003) stated that his task "...is not to stipulate a definition and prove its merit, but to examine how teachers and students in classrooms interpret global education" (p.11). If researchers and educators are to be successful in understanding how to best teach for global learning, we must examine the work that is being done by educators who are committed to global

learning. These educators can inform our understanding in designing curriculum and pedagogy for global education, and in teaching for global learning. The present study makes a significant contribution to existing global education literature because it listens to the perspectives of those who are committed to global learning and whose voices have not been reflected in the literature. These diverse educators from outside the field of the social sciences, at all grade levels, and from around the US and the world teach global education not because it is their curriculum, but because it is their passion and their moral obligation to their students. It is our responsibility as researchers and educators to listen to their voices as we determine how we can prepare this generation of students to become contributing members of the world community of the 21st Century

Overview of the Study

While investigating the existing literature on global education and teacher practice in order to inform my pilot study, I discovered the critical lack of empirical research in these areas. It was therefore my aim to add to the body of literature on global education specifically in the area of empirical research with the current study. Using Hicks' (2003b, 2007b) four-fold framework for global education as a theoretical lens, I examined the ways in which K-12 educators engaged in telecollaborative global learning projects conceptualized global education, taught for global learning, and the factors that influenced their decision making processes.

I solicited participants for the study from a group of educators involved in learning circle projects through the international teacher resource website iEARN. From the group of initial respondents, a purposeful sampling was selected. In identifying the sampling, it was my intention to maximize diversity of geographical locations, years of

teacher experience with global learning and learning circle projects, and teacher areas of expertise.

All data were collected electronically through the use of ICT, and consisted of four electronic interview guides, a semi-structured interview conducted using Skype, blog and message board postings, emails, and analysis of school literature. Interviews were transcribed word-for-word by me. I first analyzed and open-coded the data, looking for recurrent themes, then did thematic analysis and axial coding. This process was facilitated by the use of Atlas.ti software. Finally, I identified themes, and discussed their implications for educational practice, teacher preparation programs, and future research.

Definition of Terms

The following terms can be found throughout this study. The definitions below describe the terms as they are used in the study. More detailed information can be found in Chapter 2.

Information and Communication Technology (ICT) – a general term that includes any communication device or application, such as telephones, internet, radio, television, and computer hardware and software. In education it is widely associated with videoconferencing and distance learning, as well as the use of the internet to communicate with other students, teachers, and schools.

Global citizenship education – citizenship education which extends to a respect for human rights for all of the world's people, a commitment to economic and social justice, respect for future generations and intergenerational responsibility, respect for the Earth and its diversity, and respect for cultural

diversity and commitment to building a culture of acceptance and tolerance (Pigozzi, 2006).

Global education – though this term is much debated and difficult to define, Gaudelli (2003) offers a good summary. Global education is:

...a curriculum that seeks to prepare students to live in a progressively interconnected world where the study of human values, institutions, and behaviors are contextually examined through a pedagogical style that promotes critical engagement of complex, diverse information toward socially meaningful action. (p. 11)

Global learning – The American Council on Education (ACE, 2011) defines global learning as, “The knowledge, skills, and attitudes that students acquire through a variety of experiences that enable them to understand world cultures and events; analyze global systems; appreciate cultural differences; and apply this knowledge and appreciation to their lives as citizens and workers” (¶ 1).

Global mindedness – Carano (2010) defines global mindedness in terms of a feeling of interconnectedness between the individual and the world community. He states the global mindedness is, “Seeing oneself as being interconnected with the world community and feeling a sense of responsibility toward the members of that community. This commitment is reflected in the individual’s attitudes, beliefs, and behaviors” (p. 10).

iEARN – “(International Education and Resource Network) is the world's largest non-profit global network that enables teachers and youth to use the

Internet and other technologies to collaborate on projects that enhance learning and make a difference in the world” (iEARN, 2011b).

Learning circles – Learning circles are highly interactive, collaborative projects facilitated by www.iEARN.org. A team of six to eight teachers and their classrooms join in the virtual space of an electronic classroom and, over the space of 14 weeks, work on a curriculum drawn by the classrooms, organized around a selected theme. At the end of the term the team collects and publishes its work (iEARN, 2011a).

Telecollaboration – projects completed collaboratively by students and teachers through the use of online tools and/or ICT.

Overview of Chapters

This body of work consists of five chapters which address the major research questions. Chapter two discusses the existing literature in the fields of global education and global citizenship education, including the history of the field and definitions of global education. It also includes an overview of the empirical research related to global education. Chapter three outlines the methodology used in this qualitative case study. Chapter four outlines the findings of the study as they relate to the research questions. Chapter five summarizes and discusses the emergent themes, and outlines their implications for educational practice and teacher preparation. Finally, this manuscript concludes with a summary of the limitations of the study and suggestions for future research.

CHAPTER 2: REVIEW OF LITERATURE

The world in which we live has become an increasingly flat one, in which technology connects us to others in ways never before experienced. Friedman (2007) points this out, and it creates an imperative for those in education to prepare students for a new, interconnected world. Merryfield (2000) argues that the educational challenges presented by a newly interconnected global society are compounded by increasing diversity and inequity in the US and globalization of the world's economic, political, and environmental systems, thus altering the knowledge and skills young people will need in order to become effective citizens.

At the same time, there has been a resurgence in educational literature calling for global education to prepare students for this increasing interconnectedness among people and nations (Adams, 2008; Carano & Berson, 2007; Davies, 2006; Ferriter, 2010; Gaudelli & Heilman, 2009; Gibson, Rimmington, & Landwehr-Brown, 2008; Merryfield, 2000; Merryfield, 2004; Mundy & Manion, 2008; Noddings, 2005; Serf, 2010; Shah & Young, 2009; Stewart, 2008; Tye & Tye, 1992; Zong, 2009; Zong, Wilson & Quashiga, 2008). Tye and Tye (1992) state that:

Global education is both an inevitable and a necessary curricular reform, then: inevitable because our society as a whole is moving toward global awareness; and necessary because our children and young people *need* to understand the world in which they live if they are to live in it happily and well. (p. 6)

Interestingly, however, the call for global education in schools is not a novel one. In 1980, before the internet or even widespread ownership of computers or other technology, Mehlinger, Hutson, Smith and Wright (1980) expressed the need for Americans to develop a global perspective if they are to be able to live and function in a global society. They called upon schools at all grade levels to take on the primary responsibility of developing this perspective in youth. Eleven years later, in 1991, the Association for Supervision and Curriculum Development (ASCD) produced a handbook edited by Tye which heralded the spread of democracy across the world and the collapse of the Berlin Wall as a call for Americans to change course from the cultural norm of separateness and to integrate global education programs in American schools. Thus the call for global education is not new, but has become a renewed theme for educators preparing students for the flattened world of the 21st Century.

History of Global Education

Gaudelli (2003) described a growing sense of oneness about the planet and its inhabitants in the early 20th Century. The lack of community as evidenced by genocides, world wars, weapons of mass destruction, and population growth led to the development of the United Nations and countless other non-governmental organizations (NGO's) and treaties among nations. Gaudelli pointed to these events as a catalyst for the push to educate young people in preparation to live in an increasingly problematic and interconnected world. Hicks (2003b) added that the establishment of the World Education Fellowship in the 1920s by progressive teachers marked the beginning of specific educational interest in world matters. Area studies and international relations courses in the United States date back to the 1950s (Zong, Wilson, & Quashiga, 2008).

The 1960s brought new interest to the young field of global studies. Educational institutions were increasingly focused on preparing young people to deal effectively with world problems, and the term “global village” was first used by McLuhan to describe a shrinking planet linked by communications technology (Gaudelli, 2003). At the same time, the world saw its first views of the planet from space, offering a new vision of a single, united system and creating a rich climate for a global curriculum (Gaudelli). During this time Henderson and his colleagues at the University of London coined the term “world studies” to recognize the need for a global dimension in the curriculum (Hicks, 2003b). While this work was being conducted in the UK, American scholars were beginning to develop a series of conceptual frameworks for global education. Anderson (1968) was one of the first to argue for a system to view global interdependence and its inclusion in curricula.

From 1973-1980 the World Studies Project in the UK, directed by Richardson, led inspiring and innovative conferences and created a loose network of educators in the UK committed to promoting world studies in school and teacher education. Richardson’s (1979) work was heavily inspired by Galtung (peace research), Freire (political education), and Rogers (humanistic psychology) and led to one of the first conceptual maps of world society that many educators went on to use in their work (Hicks, 2003b). In the US, Hanvey (1976) identified five dimensions of a global perspective, these being: (1) perspective consciousness, (2) state of the planet awareness, (3) cross-cultural awareness, (4) knowledge of global dynamics, and (5) awareness of human choice. This framework was widely influential for scholars in the US and abroad (Hicks, 2003b).

During the 1980's, Pike and Selby, working at the Centre for Global Education at the University of York, were deeply influenced by the work of Hanvey and Richardson and began to produce innovative materials for teachers and conducted regional and national in-service programs (Hicks, 2003b). In 1988 the pair produced a further developed conceptual map of the field, highlighting the four dimensions of global education. These four dimensions are (1) the spatial dimension, (2) the temporal dimension, (3) the issues dimension, and (4) the human potential dimension. Together with their five aims for global dimension, (1) systems consciousness, (2) perspective consciousness, (3) health of planet awareness, (4) involvement consciousness and preparedness, and (5) process mindedness, the four dimensions and five aims make up what Pike and Selby (1998) called the absolute minimum for teaching for global learning.

In their overview of global education in Canada, Mundy and Manion (2008) describe the movement during the 1980s as a time in which university-based educators began to advocate for a more unified approach to what they had begun to call "global education". This movement was supported by non-governmental agencies and the Canadian International Development Agency (CIDA) but these efforts to integrate global education into the formal curriculum were integrated very slowly. No systematic efforts were introduced into Canadian elementary schools at this time. During the 1990s, fiscal conservatism led to cuts within CIDA and other agencies, heavily affecting global education efforts. The renewed emphasis on literacy and mathematics which characterized the educational climate of the late 1990s and early 2000s led to limited official interest in teaching world issues and global citizenship. Nonetheless, NGOs, universities, and teachers' unions remained advocates for global education during this

time, and the resurgence of interest in the decade between 2000 and 2010 in Canada led to sweeping curricular change and renewed funding for global education (Mundy and Manion).

Stewart (2008) points out that while the US federal government has played an important role in advocating foreign language study and area expertise at the postsecondary level, knowledge of the world must no longer be the domain of a privileged few (p. 205). She states that in the 21st Century, global knowledge, awareness and the skills needed to work on a global level are required of every educated citizen (p. 205). She calls upon the US Congress and the federal administration to create funding for a new federal and state partnership that will make access to an internationally competitive world-class education and graduating globally competent citizens a national priority. Stewart, Vice-President of Education at the Asia Society, advocates a framework for global education which begins at the elementary level and extends through high school and includes: (1) redefining high school graduation requirements to include global knowledge and skills, (2) international benchmarking of state standards, (3) making world languages a core part of the curriculum in grades 3-12, (4) increasing the capacity of educators to reach the world, and (5) using technology to expand global opportunities.

Defining Global Education

Since its inception, global education scholars have debated its definition and how to conceptualize it, perhaps due to its multidisciplinary approach to understanding (Gaudelli, 2003). Anderson (1968) stated that:

International education, like the Constitution, is what the judges say it is.

In this case, the judges are American educators and social scientists,

joined by countless school boards, parents, and others who direct and shape the work of the schools. (p.639)

The fact that global education is an amalgamation of different fields such as international relations, cultural studies, environmental study and economics causes it to be difficult to define and leads to much debate over what should and should not be included in such a definition. Gaudelli (2003) suggested that it is the vastness of the field that makes a succinct definition elusive. Zong, Wilson and Quashiga (2008) pointed out that in spite of the fact that a comprehensive theory built on the goals, content and pedagogy for global education has not been developed, numerous fresh constructs and theories have been developed as scholars have built upon and expanded the work of earlier scholars.

Cross and Molnar (1994) stated that global education lacked a precise curricular meaning and that its definition is constantly being shaped and developed due to changing world and political pressures. They added that a single view on global education is unlikely in the future, and that the debates over the nature of a global society and the content of global education are worth having. Nevertheless, they insisted that a framework that supports multiple perspectives and is capable of guiding research is needed.

It is also important to note that, as stated by Anderson (1968), global education is defined by its practitioners, and cultural differences lead to differences in conceptualization of global education. Thaman (2010) pointed out that the values that underpin many global education initiatives derive from Western cultures and are therefore not always relevant for others. In her work with Pacific Islanders, she found that

often the values and ways of learning and teaching espoused in many global education programs were meaningless for Pacific island students (p. 354).

Banks (2004) stated that until the ethnic revitalization movements of the 1960's and 1970's, citizenship education was largely intended to create nation states in which the goal was assimilationist in nature and intended to create one dominant mainstream culture. He added that global citizenship education in the 21st Century must maintain a delicate balance of diversity and unity, and should have as its goal maintaining the rights and diversity of minorities while creating unification around a set of democratic values. Skelton (2010) suggested the metaphor of a Venn Diagram, in which the goal of global learning is the common center that links the components together and creates a deeper appreciation of and interaction with others.

Carano and Berson (2007) and Mundy and Manion (2008) serve as examples of scholars who have examined frameworks and borrowed from various models to create their own. Carano and Berson (2007) drew from Hanvey, Kirkwood and Merryfield to create an eight dimensional model which includes Hanvey's five dimensions of global perspective and adds two from Merryfield (understanding the marginalized point of view and analyzing the educational legacy of colonialism) and one from Kirkwood (involvement in local or global affairs) (p. 67). Mundy and Manion (2008) drew heavily from Pike and Selby along with other scholars to create the following six axioms for high quality global education: (1) a view of the world as one system, and of human life as shaped by a history of global interdependence, (2) commitment to the idea that there are basic human rights and that these include social and economic equality as well as basic freedoms, (3) commitment to the notion of the value of cultural diversity and the

importance of intercultural understanding and tolerance for differences of opinion, (4) a belief in the efficacy of individual action, (5) a commitment to child-centered or progressive pedagogy, (6) awareness and commitment to planetary sustainability (p. 944). Mundy and Manion (2008) also conceptualized global education along a continuum with global education ideals on one hand and traditional practices on the other. For example, global social justice and solidarity teaching would be on one end of the continuum, while global competitiveness and charity would be on the other (p. 945).

Cross and Molnar (1994) described three perspectives towards global education coexisting and often competing in American schools. First, the Nationalist perspective, although recognizing the growing interdependence of the world today, identifies global education as a potential threat to US sovereignty and national interests. This view emphasizes the idea that students should learn about other nations and cultures in order to compete with them economically in the future and be a dominant world power. The second perspective, International Commerce, welcomes globalization but enforces the idea that global education must promote the ideas and perspectives needed to create and maintain international world markets. The third perspective, the Humanistic orientation, maintains that the emergence of a global society provides the opportunity to focus on social justice, human rights, cross-cultural understanding, peace, and the creation of a world community in which nations share, cooperate and respect one another's cultural values.

Gaudelli and Heilman (2009) identified six types of curricula that can be included in global education curricula. The first is Disciplinary global education. This refers to the traditional scholarly work done in schools which is apolitical and which incorporates

study of history, geography, economics and literature. Second is Human Relations global education. This refers to the study of cross-cultural understanding and the affirmation of personal identity and empowerment. This could include gender perspectives studies as described by McIntosh (2005). Third is Neoliberal global education. This type of education is focused on problems and understanding the global in order to maximize personal or national interests. This type of global education views global perspective as the key to prosperity. Wright (1994) stated that the US has traditionally embraced this type of global education as a means of maintaining its position of international strength both militarily and economically. The fourth type of global education is Environmental education, which provides awareness, inquiry, and technical skills needed to create a sustainable future. Included in this type of global education is place-based education. This study of human connection to place will, according to Noddings (2005), provide young people with the knowledge and understanding of what place means to other people around the globe. Fifth is Critical Justice education, which explores the legacy of colonialism and critiques exploitation and oppression in a social justice framework. Smith and Fairman (2005) and Carlsson-Paige and Lantieri (2005) have suggested conflict resolution frameworks and social justice education which are exemplary of this type of global education. Finally, Cosmopolitan global education also explores power relationships and fosters personal and collective responsibility toward universal human rights.

Finally, several scholars have characterized global education not in terms of what should be explored, but in terms of observable student outcomes. Serf (2010) stated that young learners should be able to employ the skills of communicating, critical reasoning,

identifying bias, prejudice and discrimination, recognizing their own values and what influences them, taking responsibility for their own actions and the consequences, evaluating the actions of others, and empathizing with others. In addition, these learners should know about the centrality of human relationships, common human experiences, needs and rights to dignity, justice and life, disparities in human living conditions, the importance of change, concepts of democracy, governance and citizenship, social and cultural identities, conflict and conciliation, sustainable development and conservation, rules, rights and responsibilities, and their own worth and the worth of other people. Shah and Young (2009) stated that global learning puts learning in a global context and fosters critical and creative thinking, self-awareness and open-mindedness towards difference, understanding of global issues and power relationships, and optimism and action for a better world.

Global Citizenship Education

Writing on behalf of the United Nations Educational, Scientific, and Cultural Organization (UNESCO), Pigozzi (2006) discussed the need to foster the development of common values of peace, tolerance, and mutual understanding. She also emphasized the need to educate citizens who will respect human rights and dignity, a commitment to economic and social justice, respect for future generations and intergenerational responsibility, respect for the Earth and its diversity, and respect for cultural diversity and commitment to building a culture of acceptance and tolerance. She proposed that in this era of globalization, the world's peoples can only thrive if they accept their common destiny and learn to live as global citizens (p. 2).

Davies (2006) described global citizenship as a relatively new concept, and one which is vague due to the traditional understanding of a citizen as belonging to a nation. She added that global citizenship implies something new to the field of global education, that is, the global citizen is not just aware of international issues and intercultural relations but takes on a more active role. The global citizen not only knows how the world works, but is willing and able to take action.

Scholars have pointed out the critical lack of knowledge of geography and world events among American students (Carano and Berson, 2007; Gaudelli and Heilman, 2009). Gaudelli and Heilman (2009) emphasized that given the enormous power of the United States on the global stage, such a lack of knowledge is disturbing and dangerous. They called for a renewed priority to be placed on geography, social studies, and citizenship education, and suggested that we must turn to global citizenship education to enable us to talk to each other across our distances and make a collective commitment to shared humanity. Global citizenship education, with its focus on nonviolence, human rights, cultural diversity, democracy, and critical tolerance, tends to be issues based and action oriented. Most importantly, it encourages young people to understand their rights and responsibilities for democratic participation at all levels, locally and globally.

Overview of Empirical Research

Educators' Understanding of Global Education

Tye and Tye's (1992) qualitative study in California focused on the creation of grounded theory regarding US schools' and teachers' change process when provided university-supported professional development in global education. They found that the majority of teachers cited cross-cultural awareness and cultural studies as the primary

goals of global education. They also found that when teachers resisted global education, they did so either because they did not understand the field, because they thought it was not an important part of their curriculum and/or they did not have time to engage in it, or because they perceived it as un-American. Teachers' behaviors towards global education were directly attributed to their attitudes towards it, and these attitudes were shaped by social interactions with other people and were constantly being modified. Tye and Tye (1993) concluded that global education initiatives can succeed when teachers feel competent, confident, and self-sufficient, because this will create an environment that positively affects teacher attitudes and behaviors.

In her Ohio study examining teacher thinking and practice regarding global education, Merryfield (1998) explored the ways in which social studies educators who were considered master teachers, those who had recently completed their first formal instruction in global education, and pre-service teachers conceptualize global education, the factors that influence teachers' decision making, and how teachers' thinking and practice can contribute to the literature. Merryfield discussed the importance of teacher theory and practice in informing the literature. She stated that while there was considerable overlap between theory and practice in her research, the teachers organized their frameworks around their students. That is, they placed their students at the center and connected the global content and pedagogy to their students' needs and interests.

Tye (1999) explored global education in 52 countries and found that its acceptance and form varied widely. However, he identified several common issues to be ecology/environment, development, intercultural relations, peace, economics, technology, and human rights. He also found that global education was viewed as a "rich world"

initiative and was viewed suspiciously by some respondents. Another dilemma faced by global education according to Tye is the existence of many related fields which have their own separate identities, such as peace education, environmental education, and intercultural education.

Merryfield (2000) examined the experiences that have led Ohio educators who have been recognized by their peers as being committed to multicultural and global education. She found that there were significant qualitative differences among those educators who were themselves ethnic minorities and those who were white (p. 429). In every case, the educators described significant events in their backgrounds which had an impact on them and led them to high levels of commitment (p. 441). However, the teachers from minority backgrounds typically described incidents in their own backgrounds while growing up in their own communities, while the white educators had to leave the US and experience long-term cultural immersion in order to develop new perspectives on themselves and their nation. They had to become minorities for a time in order to understand the experiences of other people and dedicate themselves to multicultural and global education (p. 441).

In a later study, Merryfield (2007) conducted a three-year examination of how social studies teachers make decisions on the use of the internet and websites to teach about the world and its people. Her team collected data on teachers' backgrounds, their instructional goals, critiques of sites, and their explanations of how websites were examined and incorporated into classroom practice. One of the findings which Merryfield had anticipated was that teachers found an increased appreciation for cultural complexity in their students (p. 257). The use of these diverse voices as represented by different

websites helped students to challenge stereotypes and misinformation. However, Merryfield added that a second finding was new to the literature, namely, that as students used websites to examine global connections, teachers reported that they focused on commonalities across cultures far more than differences (p. 257). Finally, Merryfield was intrigued by the paradox that in spite of the numerous global websites that were available and that teachers actively sought out, the teachers eventually relied on large American websites for knowledge about the world (p. 257).

Gaudelli (2003) studied the implementation of the state-mandated social studies curriculum at three schools in differing communities in New Jersey. He found that the degree of success varied greatly at each of the three schools, as did the pedagogy involved. The success or failure of the programs seemed to be most directly related to the teachers' enthusiasm for it. Gaudelli also identified three problems in teaching global education: nationalism, cultural relativism, and identity. He made several suggestions for addressing these problems, including contrasting an American exceptionalism model with a global model and the application of care theory.

In his 2010 dissertation study, Carano used mixed-methods methodology to study the factors to which self-identified Florida global educators attributed their global mindedness. His subjects, high school social studies educators engaged in a global education initiative, participated in a background survey, a global mindedness survey, and interviews. Carano found eight themes identified by the participants as attributing to the development of a global perspective: (a) family, (b) exposure to diversity, (c) minority status, (d) curious disposition, (e) global education courses, (f) international travel, (g) having a mentor, and (h) professional service. In addition, these themes were

perceived to influence the teachers' curricular decision making by providing strategies, resources, and empathy towards students (pp.107-108).

These empirical studies have made significant contributions to the literature in global education, specifically addressing the impact of professional development of teachers' change process (Tye & Tye, 1992, 1993), teachers' conceptualizations of global education and decision making process (Merryfield, 1998, 2007), factors which lead teachers to develop global mindedness and become committed to global education (Carano, 2010; Merryfield, 2000), and teachers' implementation of state-mandated social studies standards (Gaudelli, 2003). These studies share some important commonalities. First, they are all focused on social studies educators or global educators who are expected to deliver a prescribed global education curriculum. Second, they are concentrated on educators at the secondary school level. Third, only three of them were conducted following the attacks on the US on September 11, 2001 and the implementation of No Child Left Behind (NCLB), both of which led to important curricular, pedagogical, and philosophical changes in American education. Finally, with the exception of Tye's 1999 quantitative study, they all focused on American educators. Gaudelli (2003) emphasizes the multidisciplinary of global education, and Shah and Young (2009) propose that global education be a part of the mainstream curriculum and not simply an aspect of social studies education. Therefore, the present study builds on existing lines of inquiry by adding to the knowledge base, as it explores the ways in which teachers in fields other than social studies, lacking a global education curriculum, at all grade levels K-12, and in both the US and abroad, conceptualize global education,

how they teach for global learning, and how they make decisions in teaching for global learning.

Student Perspectives

Shah and Young (2009) presented a study by Mori on behalf of the British Development Education Association (DEA). In this quantitative study, Mori surveyed 1,995 secondary school students across England aged between 11–16 years. The students were asked if they had done any of the following at school that year: (a) Discussed news stories from around the world; (b) Thought about news stories from around the world from different points of view, (c) Discussed what people can do to make the world a better place, (d) Discussed problems from around the world even when no one has the answers. In addition, the students were asked how important, if at all, they thought it was that students experience global learning in schools. Results indicated that only about 50% of the students had experienced global learning at schools, while a slightly larger percentage felt it was important (p. 16). Students who had experienced global learning were more likely to agree that what they do in their daily lives has an impact on people in other countries and that they can make a difference. The more global education the students had experienced, the more likely they were to think they could make a difference. Shah concluded that global learning is something students want and need and has desirable social outcomes including social justice, social cohesion and environmental sustainability (p. 15).

Myers (2010) studied 77 students in an international studies program in the US to discover the ways in which they constructed global citizenship. The focus was on their personal understanding of global citizenship as well as how they articulated it with their

own national civic beliefs. Data were collected from online discussion boards, written essays, and interviews. Myers found that the students' political language for global citizenship was primarily a moral commitment framed in universal language. The majority of the students felt that in order to be a global citizen a person must be informed, engaged, and active in the global community (p.498). While the majority of the students felt that there is not a conflict between global citizenship and national citizenship because we are capable of having several allegiances, some felt that global and national citizenship are fundamentally in conflict due to the differences in values among people around the world, and a few believed that global citizenship represented the imposition of Western values on less developed countries. Myers concluded that if citizenship educators intend to help adolescents make sense of global citizenship in light of current world conditions, they should pay attention to students' own thinking about their multiple citizenship identities (p. 499).

Curriculum Analysis

Mundy and Manion (2008) conducted an exploratory study to see how global education was being implemented within Canadian elementary schools, especially in grades 4-6. They conducted a detailed analysis of the curriculum in each of the seven Canadian provinces, followed by interviews at the ministry, district, and school levels. Their goal was to provide an overview of the efforts and challenges experienced by schools, as well as to examine the kinds of organizational and policy supports provided by district and provincial administrations in each province. They found a high degree of variation in provincial curricula explicitly referring to global education or global citizenship education as a curricular goal. In some provinces it was mentioned in the

curriculum but was not a focus of elementary school student competencies, while in other provinces it was a focus of a specific grade level. Educators identified social studies as the subject area in which global education was most commonly taught, with infrequent references to cross-curricular activities that focused on global education (p. 953). In addition, Mundy and Manion (2008) found that both curricula and educators tended to concentrate on non-controversial themes, such as “the value of immigration” but not “why people are forced to emigrate”. The main areas of tension across the curricula were the issues of global economic competitiveness versus social justice and environmental sustainability (p. 955). However, the researchers noted a trend away from the “self moving outwards” model and toward interrelationships between local and international (p. 955). Finally, while most educators viewed global education as valuable, it was not a top priority, and in most cases it was viewed as optional. Educators also expressed ambivalence over its appropriateness for elementary children and felt implementation was best left to individual teachers (p. 956).

Teacher Education Research

Educational literature includes many articles on pedagogy for global education (Adams, 2008; Boyle Swiniarski, 2006; Gibson, Rimmington, & Landwehr-Brown, 2008). Since the 1990s, scholars have called for integrating global perspectives in both preservice and inservice teacher preparation programs (Zong, Wilson, & Quashiga, 2008). The Zong (2005) and Merryfield (2000) studies mentioned above emphasize the importance of cross-cultural experiences in the development of global educators. Merryfield (2002, 2004) argued that globally minded educators provide substantive culture learning as they develop perspective consciousness, teach students to challenge

stereotypes, use primary sources from the culture under study, teach about the intersections of power and prejudice, and teach dynamic change and social interconnectedness. Merryfield and Kasai (2004) added that teachers are influenced by their own experiences, knowledge, comfort level with cultural diversity and ambiguity, and level of critical thought. School and educational leaders must bear this in mind if we are to produce globally minded educators.

Research Incorporating Information and Communication Technology (ICT)

Zong (2009) examined whether participation in a computer-mediated communication (CMC) project could make an impact on pre-service teachers' global understanding and how they assign meaning to global education. The pre-service teachers logged on to an online website and engaged in web based discussions with students and teachers in many other countries on topics of international appeal. The pre-service teachers reported on their discussions and their discussions and reflected on them, and the researcher analyzed the online discussions. Zong found that the technology facilitated a deeper level of global awareness among the participants, and expressed interest in teaching about issues reflected in global learning frameworks. They identified the CMC technology as facilitating their experience by providing authentic worldwide learning experiences and meaningful dialogue (p. 623).

Abbott, Austin, Mulkeen, and Metcalfe (2004) conducted a qualitative case study to examine whether cross-national collaboration using ICT would improve the cultural awareness of special education student in Northern Ireland and the Republic of Ireland. The students, who represented the full spectrum of learning disabilities and difficulties, engaged in joint tasks using computer conferencing and videoconferencing. The

researchers found that cultural awareness improved as far as cognition allowed, with students in both schools becoming aware of both similarities and differences (p. 225).

Ferriter (2010) described the Flat Classroom Project, in which two teachers, one in Georgia in the United States and the other in Bangladesh, used digital tools to foster international collaboration. The two teachers paired students so that one in Georgia was paired with one in Bangladesh, and the pair was then given one of 10 societal trends to examine. The students used online discussion boards, video conferences, instant messages, and e-mails to communicate, and each pair created a video and a contribution to a class wiki as a final project. The teachers found that the students built impressions based upon actual people rather than stereotypes, and gained a better understanding of and appreciation for their international peers.

Theoretical Framework

In her study examining teacher thinking and practice regarding global education, Merryfield (1998) discussed the importance of teacher theory and practice in informing the literature. She stated that while there was considerable overlap between theory and practice in her research, the teachers connected global education content and pedagogy to the needs and interests of their students. In his work with schools in New Jersey, Gaudelli (2003) stated that his task was not to examine teacher practice using a prescribed definition for global education, but to explore the ways in which teachers and students interpreted it in the classroom. However, Gaudelli added that he provided his own definition of global education as a means for understanding and interpreting the data. Therefore, it is important to examine the existing theories and frameworks for global education as a means for evaluating and examining data.

Hicks (2003b, 2007b) examined the existing frameworks for global education and identified their core elements, thus defining a minimum for any form of global education. In doing so, he provided a comprehensive review and synthesized the critical elements of global education curriculum and pedagogy into a four dimensional framework. I have chosen Hicks' model as the theoretical framework for the present study due to its applicability to the research questions, and for its effectiveness as a lens thorough which educators can develop their own definitions of global education.

This framework, Hicks stated (2003b, 2007b), closely echoes Pike and Selby's (1988) model and has the following four-fold form. First, the Issues Dimension embraces the five major problem areas and solutions to them of inequality/equality, injustice/justice, conflict/peace, environmental damage/care, and alienation/participation. Second, the Spatial Dimension emphasizes exploration of the local-global connections that exist in relation to these issues, including the nature of both interdependency and dependency. Third, the Temporal Dimension emphasizes exploration of the interconnections that exist between the past, present, and future in relation to such issues and in particular scenarios of preferred futures. Fourth, the Process Dimension emphasizes a participatory and experiential pedagogy which explores differing value perspectives and leads to politically aware local-global citizenship.

The Issues Dimension

The Issues Dimension includes the four primary problem areas that need to be explored. Hicks (2007b) describes these as the conflicts of wealth and poverty, human rights, peace and conflict, and the environment (p. 24). In exploring the Issues Dimension, Hicks (2007b) states that students need to discuss local and global issues,

interconnections between issues, and others' perspectives through the use of research and inquiry, evaluating, presenting and organizing information, analyzing trends, and critical decision making (p. 21). Finally, students should not only learn about specific examples from each problem area, but also study and develop solutions to such problems (p. 24).

The Spatial Dimension

Hicks' Spatial Dimension (2003b, 2007b) explores the connections between the global and the local, and the interdependence between issues, people, places, and countries. At the same time, the nature of dependency is critical, as is the importance of these connections being equitable ones (2007b, pp. 24-25). Students should develop knowledge and understanding of the connections and interdependence of global systems, human beings as a species, and of the self as a whole person. This understanding involves relational thinking, systems thinking, interpersonal relationships, and cooperation as students develop flexibility in adaptation to change, willingness to work with and learn from others, consideration of the common good, and a sense of solidarity with others (2007b, p. 21).

The Temporal Dimension

Hick's (2003b, 2007b) temporal dimension explores the connections that exist between the past, present, and future, and in particular emphasizes the need to think more critically and creatively about the future impact of local and global issues (2007b, p. 25). Students learn about the relationship of past, present, and future, the importance of sustainable development, and the potential for action at all levels, personal to global. They utilize creative and lateral thinking, problem solving skills, and taking personal action, while demonstrating a tolerance of ambiguity and uncertainty, preparedness to

consider long-term consequences, and a commitment to personal and social action (2007b, p. 21).

The Process Dimension

Hicks' Process Dimension (2003b, 2007b) emphasizes the personal and social skills that are needed to work cooperatively with others. It focuses on the pedagogical practices that are most appropriate for teaching and learning about global issues (2007b, p. 25). Hicks (2003a) states that how students learn is as important as what they learn, and that participatory and experiential modes of learning foster student autonomy and develop critical thinking skills:

Effective learning is seen as arising out of affirmation of each pupil's individual worth, the development of a wide range of cooperative skills, the ability to discuss and debate issues, to reflect critically on everyday life and events in the wider world, and to act as responsible citizens. This requires a teaching style which is open and facilitative. Its intention is to model participation, cooperation, and justice in everyday classroom interaction, believing that the medium of learning should match the message. (2003a, p. 13)

This four-part framework includes an examination of contemporary global issues, ways in which these issues are interrelated spatially and temporally, and appropriate pedagogy for investigating issues of global education (Hicks, 2007b, p. 25-26). Because of its comprehensiveness, built upon the theories and frameworks established by others, and its emphasis on pedagogy, it is the most

appropriate theoretical lens for the design of the present study, and for the collection and analysis of data.

Summary

While the existing frameworks for global education are not conclusive, they share some commonalities that promote certain attributes among global educators. Merryfield (2002) described the common characteristics of global educators as confronting stereotypes, resisting simplification of other cultures and global issues, habitually examining multiple perspectives, teaching about power, discrimination, and injustice, and providing cross-cultural learning. Hicks (2003a, 2003b, 2007b) examined existing frameworks for global education and added an emphasis on pedagogy. His resulting framework serves as the theoretical lens for the present study.

It is also clear that globally minded educators can be created through deep personal experiences with other cultures and discrimination. These experiences have traditionally been cultural exchange programs or personal experiences as a minority in a majority culture, but new research by Zong (2009) and others show that these experiences may be conducted using ICT. This is important information for district, school, and teacher leaders, and well as those involved in pre-service education. If teachers are going to be willing and able to create globally minded students, prepared for the interconnected world of the 21st Century, they must themselves develop global knowledge and pedagogical competence.

Existing empirical research into how educators conceptualize global education, how they teach for global learning, and how they make decisions for global learning is quite limited. Additionally, these existing studies focus primarily on social studies

educators and/or those who are charged with teaching a specific global education curriculum, in a secondary school setting, and within the US. Still fewer studies were conducted following the world changing events of September 11, 2001 and the implementation of NCLB. The present research study, therefore, adds to the existing body of research in important ways, as it focuses on non-social studies educators, with no prescribed global education curriculum, at all grade levels K-12, in both the US and abroad, and following the educational and philosophical changes brought about by September 11 and NCLB. It is imperative that we understand how these educators are teaching their students to be globally minded and to participate in the flattened world of the 21st Century. Therefore, this study explores how these educators conceptualize global education, how they teach for global learning, and how they make decisions related to pedagogy and curriculum when teaching for global learning.

Chapter three will discuss the methodology used in this qualitative case study. Chapter four outlines the findings of the study as they relate to the research questions. Finally, chapter five discusses the results in relation to Hicks' four dimensional framework for global education (2003b, 2007b), and outlines implications for educational practice, limitations of the present study, and suggestions for future research.

CHAPTER 3: METHODOLOGY

Introduction

This chapter describes the methodology used to plan and implement the research design, collect and analyze data, and report research findings. In the first section, I discuss the research purpose, the questions that guided it, and the rationale for choosing case study methodology. Next, I discuss the research setting and participants, and the researcher's role and access. Section three introduces the data collection, management, and analysis plans, including an explanation of the use of Computer Assisted Qualitative Data Analysis Software (CAQDAS). Section four discusses positionality, confidentiality and ethics, validity and reliability, transferability, dependability, and confirmability. The final section explores the limitations of the study and a summary of the chapter.

Research Purpose and Questions

My previous work with fifth grade public school students in an upper socioeconomic suburb of a major city in the southeastern United States indicated that students' interest in learning more about other children around the world develops through the use of telecollaborative projects. The purpose of the current study was to examine how these projects are used by other teachers both in the United States and abroad to develop global understanding among schoolchildren and promote global citizenship. In spite of the enormous amount of existing literature emphasizing the need for global learning among K-12 students and suggesting pedagogy, many researchers point out the critical lack of empirical evidence demonstrating that global learning is

taking place in schools, or describing ways in which teachers can teach for global citizenship (Davies, 2006; Gaudelli, 2003; Merryfield, 2000; Mundy and Manion, 2008; Myers, 2010; Shah and Young, 2009; Zong, 2009; Zong, Wilson & Quashiga, 2008).

Little is known about how teachers who do encourage global learning make decisions and implement their programs. Qualitative case study methodology was selected because it is the most appropriate to answering the following questions:

1. How do K-12 educators who engage in telecollaborative learning projects conceptualize global education?
2. How do these K-12 educators teach for global learning?
3. How do these K-12 educators make decisions about pedagogy and curricula when teaching for global learning?

Case Study Research

Merriam (2009) defines case study research as “an in-depth description and analysis of a bounded system” (p. 40). Yin (2003) states that when how and why research questions are present, and when the researcher explores operational links traced over time rather than frequencies, the use of case studies, experiments, or histories are preferred. Yin adds that case study research is the most appropriate design when the investigator has little control over events, and when the focus is contemporary and a real-life situation.

This research meets these criteria as described by Yin (2003). My study was a case study analyzing how teachers conceptualize global learning, and how they make decisions and implement global education in their classrooms. The bounded system involved in the study was a single group of teachers from countries around the world who were currently engaged in collaborative global learning projects through iEARN.

The study included teachers in the US and abroad, working within their own professional settings, communicating through the use of ICT. I had no control over the procedures and methods teachers used in implementing global learning in their classrooms. Instead, I sought to explain how teachers conceptualize global learning and what pedagogy they use to teach for global education and citizenship. Finally, Yin (2003) adds that case studies are preferred when examining contemporary events in which subjects' behaviors cannot be manipulated. Case study research is therefore appropriate for this study.

Research Setting and Participants

The participants for this study were recruited from teacher members of iEARN. They were located in schools throughout the United States and the world, namely, California, Tennessee, Illinois, Jordan, Belarus, and India. The criteria for inclusion were that the participants were actively involved in collaborative learning circle projects sponsored by iEARN. According to Merriam (2009), purposeful sampling is based on the assumption that the researcher is attempting to gain insight and must select a sample from which the most can be learned. Therefore, I solicited interested educators by sending an email to all current participants in the spring 2011 learning circles program. I then selected six participants, three American and three who represent the international community from the initial respondents, attempting to maximize diversity among the participant group examining years of experience with telecollaboration of the teacher, grade levels of students, teachers' areas of instruction, and geographical locations.

Negotiating Access

I first became a member of iEARN in 2009. At that time, my membership was funded by a grant I procured from a local women's organization. This past academic year the entire school had access to iEARN, paid for through donations to a fund intended for schoolwide enrichment. Through my membership I had worked on several projects with other schools and had therefore already established collegial relationships with several other teachers in the US and abroad. The coordinator of the learning circles project, Dr. Barry Kramer, was the leader of the group I participated in during the spring of 2010. I communicated with Dr. Kramer and he agreed to forward a posting from me seeking participants. I also had access to the online message boards participants used to communicate with one another, as well as websites where final projects were posted. Because I was already a member of iEARN, and had been for the past year, I expected this access to be easier than it might be if I were an outsider. In addition, I am a teacher with a history of working in international settings, so I shared some common beliefs and experiences with other iEARN members. These factors facilitated my access to the site and its members.

Researcher's Role

I had been a participant in learning circles and holiday card exchanges for the past two years, and thus had insider knowledge of the programs and how they function. I was a fellow teacher and had established a professional friendship with several participants. During the course of the study, however, I removed myself from participation in any telecollaborative projects. My intention in doing so was to reduce possible bias and any pressure iEARN members might feel if I were a fellow participant in their group.

Because I was a fellow teacher and former learning circle partner, I feel that participants were open and honest and did not feel any compulsion to give only positive responses.

Data Collection Plan

Data were collected from multiple sources in an effort to achieve triangulation. According to Merriam (2009), triangulation involves collecting multiple sources of data and analyses of those multiple sources resulting in common findings. Yin (2003) describes these common findings as “converging lines of inquiry” (p. 98). I began by using an electronic interview guide intended to help me identify participants (see Appendix C). This questionnaire included participant background information, years of experience using telecollaboration, number of telecollaborative projects completed, and open ended questions designed to analyze participants’ motivation for engaging in this type of work.

Once the sample was identified, data were collected in the forms of three more electronic interview guides, semi-structured interviews by Skype, message exchanges, iEARN postings, and document analyses of participant teachers’ school literature. Reflective memos were written to record my own impressions and theories as the study took shape.

The second interview guide focused on participants’ experiences with learning circles, and explored why they had decided to engage in them, what classroom practices they engaged in, whether other teachers within their buildings participated in learning circles, and what participants’ goals were in joining learning circles. The same interview guide also asked participants to define global education and global learning (see Appendix D).

The third electronic interview guide explored participants' personal experiences with global learning and travel. It asked them to describe any significant experiences with people from other cultures and/or countries. Participants were also asked to describe any training, formal or informal, which they had had to teach for global learning (see Appendix E).

The fourth and final interview guide explored factors which related to the participants' feelings of success or failure in integrating global education through telecollaborative learning circles into their classrooms. They were asked to identify factors which facilitated their instruction, as well as those which hindered it. Participants described their concerns about teaching for global education, how integrating global learning has transformed their pedagogy, and to give specific examples of student learning resulting from their global education practice (see Appendix F).

Semi-structured interviews were facilitated by ICT through the use of Skype. Participants were asked to further describe answers from their electronic interview guides, and described their conceptualizations of what it means to be a global educator and how a person might become one. They were also asked how one might develop global mindedness in their students, and how a globally minded educator can encourage others to develop global perspectives (see Appendix G).

While some of the participants' native languages were not English, data collection was limited to documents and exchanges written in English. This minimized any misinterpretation due to translation. However, I have a BA in French, a year of study in France during my undergraduate education, a diploma in Turkish language study from Ankara University's Tömer language program, and a MEd in Second Language

Education with an English to Speakers of other Languages (ESOL) concentration from the State University of New York at New Paltz. I am also a certified teacher in French and ESOL in Georgia and New York for grades K-12, and I have 17 years of language teaching experience working with kindergarten through adult learners both in the US and abroad. I have studied five languages and I am comfortably fluent in three. Finally, I hold Global Engagement Certification with Distinction from Kennesaw State University. Because of these experiences and training, I felt qualified to make clarifications by asking questions or using my own interpretations in cases where the meaning may not be clear due to lack of English language skills on the part of the participant.

Data Management Plan

As data were received they were recorded on a spreadsheet detailing the name of the participant, their pseudonym, the date, the type of data, and the format of the data, that is, whether they were in electronic, audio, or hard copy format. All electronic data were stored on a password protected computer as well as a password protected portable hard drive. All electronic data were then printed. All audio material was recorded using a digital audio recorder as well as the computer program Audacity, a free digital audio editor written and developed by volunteer developers from around the world and coordinated by SourceForge.net, an online tool that provides free tools for open-source software projects (Audacity, 2011). I transcribed these data word-for-word myself. Computer audio files were also stored on a password protected computer. Finally, all of the data in hard copy were stored in binders, with each participant having their own binder, then locked in a filing cabinet located in my home. The key to the filing cabinet was on my personal key ring.

Data Analysis

Bogdan and Biklen (2007) explain that data analysis in qualitative research involves the sorting and organizing of data, breaking them into manageable units, then coding, examining, and searching for patterns. Merriam (2009) adds that, because of the sheer volume of data that can be collected in qualitative research, it is imperative that the researcher do analyses simultaneously with data collection. I began by coding data using open coding, in which I did a preliminary analysis of the data and assigned codes to it based on recurring ideas (Bogdan & Biklen, 2007; Merriam, 2009). In this manner I began to construct categories and establish themes. I then did thematic analysis using a conceptual mapping approach as suggested by Grbich (2007), in which major themes are further broken down into smaller categories. These smaller categories then became the basis for axial coding, in which I coded the data again as I interpreted and reflected upon the themes that were emerging (Merriam, 2009). Finally, I revisited the data as needed for recoding.

Atlas.ti

The use of Computer Assisted Qualitative Data Analysis Software (CAQDAS) facilitated the research process. Where data used to be marked and coded completely by hand, computer programs now facilitate the data's accessibility (Bogdan & Biklen, 2007). These programs allow the researcher to upload digital files, assign codes to data, and then sort them using the program. Units of text can be assigned multiple codes and sorted in multiple ways, and can be easily recoded (Bogdan & Biklen). While the researcher is still responsible for assigning codes and determining which units of data go into these codes, the program can quickly group these codes and automate the process (Merriam, 2009).

Atlas.ti was first developed by Thomas Muhr at Technical University in Berlin and was first released to market by the company Scientific Software Development, later ATLAS.ti Scientific Software Development GmbH. (Muhr, 2005) I chose to use Atlas.ti as a means of facilitating my data analysis for two reasons. First, all of my data was electronic as I collected it through ICT. I could therefore upload data into a computer program quickly and easily. Second, I had the most access to training and professional development for Atlas.ti than for any other program. Ease of use and accessibility of training led me to choose Atlas.ti.

Positionality

Qualitative research is, by its very nature, intensely personal. The researcher is the instrument through which data is collected and analyzed, and therefore all data is filtered through the researcher. Though my intention was to leave my own opinions and judgments out of the process, I am a product of my environment and experiences, and I cannot avoid interpreting the data through my personal lens. Merriam (2009) states that because it is unavoidable to eliminate the biases of the researcher, it is instead important to identify and monitor them as to how they may be influencing data collection and analysis.

I grew up in a small town in South Carolina and had very limited exposure to anything or anyone beyond my own community. From a very early age, however, I remember being fascinated by all things foreign. The sound of another language, a glimpse of tourists from abroad, the prospect of learning another language – all of these fascinated me. When I began high school I studied French and Latin and was pleased to find that I had a talent for language learning. My best friends in high school were sisters,

born to a French father and a Canadian mother, who had lived in Africa before relocating to our small town in the American South. Going to their home was like taking a trip to another country. They spoke French and drank wine at dinner, and treated one another in ways that were very different from my own cultural experience in a middle class American home.

The summer before I graduated high school I spent a month attending the Governor's School of South Carolina, a selective program held at the College of Charleston for gifted students. There, every student took a course in global studies, with each course being taught from a different perspective. My class was taught by Dr. Rashford, a tall black man with a soft Caribbean accent. For four weeks Dr. Rashford introduced us to peoples and cultures very different from our own, with a focus on indigenous tribes in faraway places. I enjoyed the work but had difficulty understanding what the San Bushmen of the Kalahari Desert had to do with me. Our last assignment was to reflect on our studies and their purpose, and in writing that paper I finally understood Dr. Rashford's purpose. I was struck by the interconnectedness of all people and things, and the realization that my decisions affected so many others around the world.

When I entered college I majored in French, and spent a year abroad in Paris. It was there that I learned that history is a story, and that it changes based on the perspective of the teller. I began to see the world and my own culture through an entirely different lens. Upon graduation, I became a French teacher and soon married, not surprisingly, a foreign man from Istanbul, Turkey. He represented new and exciting things to me – opportunities and perspectives to explore and experience.

Shortly after we married, my husband and I moved to Istanbul, Turkey, and I taught in schools there for five years. I was struck by the fact that, though the methodology and curricula were vastly different from what I was familiar with, I found the kids to be very much the same as typical American teenagers, interested primarily in themselves, their hobbies, and each other. Over the next 15 years I had the good fortune to teach at an all-girls' private boarding school in Virginia, a public high school in Queens, New York, a public middle school in upstate New York, an exclusive private school in Turkey, and two very different public elementary schools in Georgia – one Title 1 with an ethnically and linguistically diverse student population, the other very homogeneously White and upper-socioeconomic. These schools were incredibly different from one another, but the common thread running through all of them was the children. No matter where I was, what language was being spoken, or what curriculum was being taught, the children shared the same basic needs, desires, and motivations.

These experiences led me to the conviction that if people can get to know each other on a personal level, they will begin to understand one another and will become committed to global equity and peace. It is with this firm belief in social justice and the need for global understanding that I teach my students every day to better know and understand the world and its people. One of my proudest moments as a parent occurred when my 13 year old son, while watching a news program on television, correctly identified the topic of the show, Timbuktu, as being in Mali. He went on to describe to me the ancient civilization that ruled Timbuktu and tell me about its leader. All of these things he had learned on his own, through self-directed study and readings. My husband and I are determined that our own children will be globally minded, socially conscious

people who contribute positively to the world they live in. I want nothing less for my students, as they will determine the kind of future we have as a species.

Confidentiality and Ethics

I ensured the confidentiality of all my participants by assigning them and their schools pseudonyms. The towns and countries in which the schools are located were not altered because this information was important to the data collection and analysis process. I did not share any of this confidential data with anyone else outside the members of my dissertation committee.

Bogdan and Biklen (2007) point out that doing research in another country or culture may result in special challenges. Different cultural groups have different perspectives and views on what is right or wrong, or appropriate or not. I proceeded in good faith with an open mind about different cultural norms. My personal knowledge of other cultures was an asset in this area. As Bogdan and Biklen suggest, I was mindful of the other cultures and adaptive to their ways of relating and knowing.

Validity and Reliability

Validity and reliability are terms commonly associated with the quantitative paradigm. Lincoln and Guba (1985) suggest that these be renamed using terms more appropriate to the philosophy underlying the qualitative paradigm. Therefore in qualitative research we commonly use the terms credibility, transferability, dependability, and confirmability in place of the internal validity, external validity, reliability, and objectivity used in quantitative methodology.

Credibility

Internal validity, or credibility, addresses the extent to which research findings match reality (Merriam, 2009). The question is asked about whether the findings are credible given the data presented. Merriam states that, because a researcher can never completely capture objective truth or reality, there are several ways in which the probability that the findings accurately reflect the data can be increased

One method of doing this is to engage in triangulation of data. In order to triangulate data, multiple sources are collected and examined for a convergence of ideas. Yin (2003) states that “any finding or conclusion in a case study is likely to be much more convincing and accurate if it is based on several different sources of information, following a corroboratory mode” (p. 98). I achieved triangulation by collecting data through questionnaires, semi-structured interviews, message exchanges, blog postings, and document analysis.

A second way of promoting internal validity suggested by Merriam (2009) is through member checking. As data was collected and findings emerged, I solicited feedback from participants to ensure that the data and findings accurately represented their thoughts and opinions. Lincoln and Guba (1985) state that member checking is a critical technique for ensuring credibility. It allows the researcher to correct errors and reduce misunderstandings, confirm data, and make preliminary summaries of findings.

Next, I collected enough data to be certain that I obtained a complete perspective. Data were collected until I reached a point where the things I saw and heard were repetitive and no new information emerged, what Merriam (2009) calls saturation (p. 219).

Finally, both Yin (2003) and Merriam (2009) emphasized that in order to have internal validity, it is critical that the researcher look for data that support alternative explanations. As I collected and analyzed data, I considered all possible explanations, and sought out data that supported all of them.

Transferability

Transferability is the qualitative equivalent of the quantitative concept of external validity. That is, to what extent can the case being studied be applied to other situations? The very nature of a case study is that it describes a bounded set in a specific context, so it would seem that findings cannot be transferable to other contexts. However, Lincoln and Guba (1985) suggest that it is the person seeking to make application of the findings to another context who must consider whether or not they are transferable. It is up to the reader of the study to decide whether or not that study applies to his situation. However, Merriam (2009) states that transferability can be enhanced through the use of thick description. I therefore used thick description, that is, highly detailed and descriptive presentation, in order to facilitate the reader's assessment of similarity between studies.

Dependability

Traditionally, reliability in quantitative research describes the extent to which a study can be repeated and obtain the same results. In qualitative research, findings depend on human behavior which is changing, and so results cannot be replicated with identical findings. As a result, qualitative researchers ask to what extent the results are consistent with the data collected. The question becomes whether the results are consistent with the data collected, and are therefore dependable (Merriam, 2009). Yin (2009) suggests that in addition to triangulation and member checking, the researcher

needs to make the steps of the process as operational as possible and to always behave as though someone is looking over your shoulder. By creating an audit trail (Lincoln and Guba, 1985) researchers can best explain how they proceeded at every step along the way, and build confidence that the process was dependable.

Confirmability

The issue of objectivity, or confirmability, relies on the ethics with which the researcher conducts the study. As a researcher, I must ensure that my own professional integrity and intellectual rigor are above reproach. For this study, I engaged in critical self-reflection and kept reflective memos in which I examined my own prejudices and biases and how they may be impacting my study. I was also aware of my own culture and background, my positionality, and was mindful to exclude them from my findings. The fact that I never met my participants in person helped in confirmability, as there was no body language or facial expressions to influence dialogue when working with electronic conversations. I was also careful and mindful that electronic communication can be misinterpreted, as can language. I kept an open mind and made sure that my own language was as free from slang, jargon, or figures of speech in order to avoid misinterpretation.

Limitations

I faced limitations in my study due to the issues of distance and time. I was not able to meet with, interview, and observe my participants in person, so I was limited to what they told me about their students and their practice. It is possible that some teachers wanted to appear positive and exaggerated or even fabricated what happens in their classrooms. In addition, two of my participants were unable to be interviewed because

they did not have the technology and/or hardware to be interviewed using Skype. One of these participants submitted answers to several interview questions in writing.

I was also limited by time. As a current and former participant in telecollaborative projects myself, I found that the work we did with them never met my own expectations because I was always limited by time and having to complete certain standard curricula before we could engage in our collaborative projects. Thus I often felt my students could have benefitted more from the projects if we had had more opportunity to pursue them.

Finally, the study was limited by language and culture. Three of the participants were not native speakers of English. They may not have been able to fully and clearly express their thoughts and opinions in English. They may also have felt bounded by cultural assumptions, either because they were attempting to satisfy me and my cultural background, or because they felt that, as a person not from their culture, I would not fully understand or appreciate their comments.

Summary

A plethora of literature discusses the flattening of the world we live in (Friedman, 2007) and the need for teachers to educate K-12 students for global learning. However, the literature is critically lacking in empirical evidence in how this is to take place in classrooms. Scholars differ in their own understanding of what global education means and should look like in schools, how teachers are to incorporate it into their curriculum, and how it benefits K-12 learners. Following the completion of a pilot study in which I determined that telecollaborative projects such as those sponsored by iEARN can be effective in promoting student awareness and global understanding, I intended to address some of the larger issues raised by these authors. It was my intention that this study

would shed a light on classroom practice in the United States and around the world, and would provide valuable information on teacher practice when educating for global learning.

Case study methods of qualitative research were used in order to conduct the study. The participants were a purposeful sampling of six teachers engaged in telecollaborative projects through iEARN, with the sample being chosen to maximize diversity of participants and their students. Hicks' (2003b, 2007b) framework for global education was used as a lens through which data were collected and analyzed. Data were collected through electronic interview guides, semi-structured interviews, message exchanges, blog postings, document analysis, and reflective memos. I analyzed this data through open and axial coding, facilitated by the use of Atlas.ti. Confidentiality was ensured through the use of pseudonyms. Credibility, transferability, dependability, and confirmability were achieved by using thick description, triangulation of data, member checking, collecting adequate data, creating an audit trail, reviewing the literature, and carefully considering and monitoring my own positionality.

This study was a first step in determining how teachers, schools, and districts can educate students for global understanding and prepare them to work cooperatively in the world of the 21st Century. In the next chapter, the results to the following research questions will be presented:

1. How do K-12 educators who engage in telecollaborative learning projects conceptualize global education?
2. How do these K-12 educators teach for global learning?

3. How do these K-12 educators make decisions about pedagogy and curricula when teaching for global learning?

In Chapter 5, these findings will be discussed within the context of Hicks' framework for global education.

CHAPTER 4: RESULTS

Introduction

The purpose of this study was to examine how teachers who engage in telecollaborative learning projects conceptualize global education, and how they make curricular and pedagogical decisions in the classroom when teaching for global learning. This chapter examines the findings of the case study by analyzing qualitative data to answer the three research questions guiding the study:

4. How do K-12 educators who engage in telecollaborative learning projects conceptualize global education?
5. How do these K-12 educators teach for global learning?
6. How do these K-12 educators make decisions about pedagogy and curricula when teaching for global learning?

Qualitative data were collected from each participant in the form of four electronic interview guides, a semi-structured interview, iEARN message board postings, personal communication, and in some cases, school based documentation, for example, school vision and mission statements.

Participant Profiles

The six participants for this study were selected using purposeful sampling. Of the teachers who expressed interest in participating, I selected six that represented the most diverse backgrounds and experiences. Of these, three are American and three represent the international community, in this case, Jordan, Belarus, and India. In direct contrast to

the majority of existing studies in global education, none of the six are social studies educators. All are members of iEARN, and have completed at least one learning circle project. They range in age from 26-63 years, with 4-20 years of teaching experience. All of the participants are women. Pseudonyms were used in place of participants' names and schools.

Hannah

Hannah is the media specialist at a public magnet school in San Diego, California, in the US. She retired at the end of the 2010-2011 school year. When Hannah joined the staff 12 years ago, it was already a magnet school due to a court order integrating schools in the county. However, she was an integral part of the process that led to rewriting the school's mission and vision statements to reflect a global education focus.

Hannah's commitment to global education began when she was a student herself growing up in San Diego. She participated in student exchange programs in Mexico, Spain, and France and later became a foreign language teacher. She has travelled extensively throughout North America, Europe, and Northern Africa. While Hannah has had extensive coursework in languages, literature, and culture, she has never had training specifically in teaching for global education other than online teacher training courses offered by iEARN.

Catherine

Catherine is a retired technology teacher who volunteers part time at a public, urban elementary school in Tennessee in the US, where she works with K-5 gifted students on technology based learning projects. She has been an iEARN member for 13 years and has participated in learning circles twice yearly since joining. She has also

attended every summer iEARN conference since 1998, and has travelled internationally quite extensively as a result. During one of these conferences she met a teacher from Nepal, and the two have since founded a non-profit 501c3 foundation to help a school located approximately 100 kilometers from Kathmandu.

Teaching was a second career for Catherine, whose international exposure began when she worked as an executive in international marketing for a major health and beauty aids company. She has not had any official training for global education, but attributes her knowledge to her own personal travel experiences and working with other teachers and students from around the world.

Tara

Tara is a technology teacher at a small K-8 Catholic school in a Chicago, Illinois suburb in the US with 18 years of classroom experience. Though she has been an iEARN member for about three years, this past year was her first experience doing learning circles. She has never travelled outside of the United States, and has had no formal training for teaching global education. She has been looking for projects that allow her to teach technology to her students using global learning as the content.

Khalisah

Khalisah teaches technology to grades 7-11 at a public school for gifted students in Jordan. She has been an iEARN member for four years and has participated in three learning circles, serving this past spring as the facilitator for her group's learning circle. Khalisah travelled to other countries as a very young child but states that she has been influenced by hearing about the extensive travel experiences of her family and friends. She attributes her knowledge of global education to these conversations, as well as a few

online iEARN courses and exposure due to online and other media. Khalisah has had no formal training in global education.

Katya

Katya teaches English to students at a public middle/high school attached to a major university in Belarus. She is the youngest participant in the group and has the least teaching experience – four years. She joined iEARN in February, 2011 and thus has just completed her first learning circle project. She traveled to neighboring countries while growing up in Belarus but later spent two months during her college years working in a summer camp in Wisconsin, in the United States. Katya has not had any formal training for teaching for global education.

Garima

Garima teaches high school English at a private school in New Delhi, India. She is an experienced teacher with about 20 years in the classroom, and has been a member of iEARN for one year. She has participated in two learning circles. She has traveled extensively throughout Europe and Asia as a teacher for exchange programs, conferences, and with students. Prior to joining iEARN, she was a member of the Asia Europe Classroom Network Conferences (AEC-NET), and attended conferences in Malaysia and Denmark. In 2010, Garima co-organized the AEC-NET conference in New Delhi. She has never had training for global education, but became interested in it for her own personal growth.

In spite of their differences, the six participants in the current study share some very important commonalities. First, none of them are social studies or world civilization teachers. Instead, they represent the fields of technology, media studies, and language

studies (see Table 1). None have formal training in teaching for global education or global learning. All came to be involved in the field due to personal experiences or interests. Finally, all of the participants independently joined iEARN and are the only teachers in their schools who are engaged in learning circle projects.

Table 1: Participant Profiles

Pseudonym	Age	School Type	Location	Grade Level / Subject Area
Hannah	63	Public (magnet)	California, USA	K-12 / Library Sciences
Catherine	63	Public	Tennessee, USA	K-5 / Technology Teacher
Tara	40	Parochial (Catholic)	Illinois, USA	PreK-8 / Technology Teacher
Khalisah	34	Public	Jordan	7-12 / Technology Teacher
Katya	26	Public	Belarus	7-12 / English Teacher
Garima	47	Private	India	11-12 / English Teacher

How Do K-12 Educators who Engage in Telecollaborative Learning Projects Conceptualize Global Education?

A comprehensive definition of what global education means and should achieve has been debated and indeed scholars disagree about whether a single view is even worth having (Cross and Molnar, 1994). Anderson (1968) points out that global education is defined by its practitioners, and Thaman (2010) added that many global education initiatives derive from Western cultures and are therefore not always relevant for others. Merryfield (1998) discussed the overlap between theory and practice, and stated that teachers organized their frameworks around their students. They placed the students at the center and connected the global content and pedagogy to meet students' needs and interests. Gaudelli (2003) added that in his research with schools in New Jersey, his task was not to prove the merit of a definition of global education, but to better understand how teachers conceptualize it and teach for it.

In the current study, participants framed their conceptualizations of global education around their own experiences and values, and around students' needs and experiences. When asked to define global education and global learning, the answers given reflected not a definition based in theory, but in personal experience and pedagogical and personal beliefs. Specifically, three themes emerged from the research: the importance of personal connections, the development of interpersonal and intercultural understanding, and activism.

Personal Connections

When asked to define global education and global learning, five of the six participants specially referred to the importance of personal connections in their

responses. Catherine responded that global education "...means connecting with peers around the world in an appreciation of cultural differences" (Catherine, personal communication, April 19, 2011). Katya added that global education was "...educating people from other countries and being educated by them" (Katya, personal communication, April 24, 2011). Tara viewed the relationships she formed as a tool for global learning. "Global learning is collaboration, almost instant help, sharing knowledge and talent, and learning something new every time" (Tara, personal communication, April 25, 2011).

Several of the participants discussed personal connections as powerful motivators for their own work in global education. Hannah discussed her early involvement with iEARN, stating, "I joined iEARN when I started [an iEARN project] at school, and I started donating extra time and money after [iEARN director] took me and others out to dinner at the 2006 ISTE meeting" (Hannah, personal communication, May 2, 2011). Tara discussed the associations she formed through learning circle projects as new friendships. She stated, "This past year, I've had a number of great experiences with educators from other countries since I've participated in the many global projects. I reconnect through Skype" (Tara, personal communication, May 12, 2011). For Hannah, these connections often became deep personal and professional bonds. "Twice our partners (one from Uzbekistan and one from Ghana) ended up visiting our school and staying in my house. They were very excellent and generous teachers, and they talked in person to our students" (Hannah, personal communication, May 2, 2011). During an interview, Hannah added that these bonds have facilitated her learning circle work. "I have relationships, and there's always someone who wants to go even on a fast turnaround, oh, yeah sure

we'll do that, but it depends on the relationships you've already established" (Hannah, personal communication, June 22, 2011). Khalisah discussed the importance of these strong relationships in maintaining motivation for future projects. "After joining the first learning circle, things were so interesting, dealing with teachers and students from all around the world" (Khalisah, personal communication, April 19, 2011).

When asked if she considered herself a global educator, Tara discussed the importance of personal connections:

Holly: Would you consider yourself a global educator?

Tara: Yes. Last year probably not, but this year definitely yes.

Holly: So what's the difference?

Tara: Um, well I think just getting involved in global projects and connecting through other kinds of, you know my PLN is growing, my personal learning network, I have people all over the world that I connect with, um, I've joined several, three global, um, sites, and I'm on the board of two of them.

During the same interview, Tara added that forming strong relationships with colleagues was a critical first step in becoming a global educator:

Holly: How do you think you can...teach someone to be a global educator?

Tara: Yeah, um, you've got to just jump in... take that first step. Talk to people, connect with people... Just listening, and um, I think they need to hear about it first, before they can jump in and do it, and I

have a lot of pictures, and videos, and experiences that might be helpful.

When asked how to motivate other teachers to become globally minded, especially when their enthusiasm begins to waver, Catherine also discussed the importance of relationships:

Catherine: [Teachers will] be better at it if they'd get to a convention or a conference... If they would go to a conference and meet all the other teachers, that are experiencing the same things they are, and yet they're still doing this great work, then it's a buy-in.

Holly: ...So do you think meeting the other teachers would help because they'd hear how to do it, or would it be the personal connection, or what would make the difference?

Catherine: It's the personal connection, it's the understanding, you know, the string of ideas of how to do well, and seeing the finished product.

Catherine added that personal connections become powerful motivators for educators to engage in telecollaborative learning projects:

Once [teachers] meet some, for example, meeting someone from Indonesia, which I have done at one of the conferences. And then you see the tsunami in Indonesia, and realize your friend's village has been wiped out. You have an awareness. You're much more aware when you meet people and understand what they've been through. Or like my friend in Sierra Leone who, um... when I first met him he was 25, and had lived

through ten years of war in the country of Sierra Leone. You know, you have a connection with him. It's just, it's really going to take getting out there and meeting them. (Catherine, personal communication, June 28, 2011)

These connections are also powerful motivators for students engaging in global learning projects. When describing how she presented telecollaborative projects to her students, Katya stated:

I told my students that thanks to participation in learning circles we would find new friends from all over the world and get the chance to use English in virtual [*sic*] communication. Also, it was exciting for them to share information about [their school and city] with people from other countries.

(Katya, personal communication, June 13, 2011)

Garima added that forming strong relationships creates opportunities for students to have meaningful experiences vicariously through their partners: "Oh, they have learnt a lot... they have come out of this... I am the best... syndrome. They have become so very patient. Many of them have been part of exchange programmes which have made them more understanding towards people" (Garima, personal communication, June 13, 2011). During an interview, Garima added that these connections lead students to a deep level of empathy:

And so I give them that kind of exposure where they would understand things better. Visiting places is not just for fun. When you live the people, when you start looking at them, how they... how does a family in Sweden or in Denmark or in Singapore or in Phillipines or in Indonesia, look at the

kind of knowledge they get. And then the kind of bond that they share, I mean these students who went to Indonesia, and then they hosted some Indonesian students, and today they feel as if Jakarta is their hometown... The children were so moved and touched by all that. I mean, it's not necessary that you need to experience everything yourself, when you see your friends talking about it, when you see somebody mentioning all that. In fact, I live in Delhi and my students have not really faced any kind of disaster like this, but down south when we had the tsunami there were so many villages that were wiped off, so many problems that came up, and so the children could relate to all that (Garima, personal communication, July 2, 2011).

In her work with K-8 students, Tara discussed the realization that her students came to upon making personal connections with other students around the world:

Tara: They um, the one comment they usually say is, "They look like us". That's a, that's a big thing that I've seen... you know, they have the same interests. They like Justin Bieber, you know? Or whatever. They like to eat pizza. So I think that it's that commonality.

Holly: Right.

Tara: Even though they live far away and maybe their temperature's different, and their time zone's different, they're still the same. And that's the main, that's the main focus of what I was working

on. Simply connecting. Even though we're worlds away, we're still close.

During an interview, Hannah summed up her personal commitment to global education and learning by restating the importance of personal connections to her. "I'm personally committed just because I like it so much, and I, I've made so many friends from around the world. I won't let them down" (Hannah, personal communication, June 22, 2011).

Interpersonal and Intercultural Understanding

Participants discussed interpersonal and intercultural understanding as being both a primary objective and a primary outcome of their work in global education and global learning. This was true both for themselves personally as well as for their students. They mentioned learning from and teaching others, sharing cultural information and understanding, dealing with issues of prejudice and discrimination, and personal growth.

Learning from and Teaching Others

Participants mentioned learning from and teaching others in their definitions of global education and global learning. Katya stated, "To me [global education] is educating people from other countries and being educated by them" (Katya, personal communication, April 24, 2011). Catherine defined global learning as "gaining an understanding of another culture and how similar and different it is from our own" (Catherine, personal communication, April 19, 2011), and stated that "[Global education] means connecting with peers around the world with an appreciation of cultural differences. It also provides an opportunity to share resources and technology innovations" (Catherine, personal communication, April 19, 2011). Khalisah noted that one of her goals in engaging in telecollaborative learning circles was to "...talk about my

culture. Let others know more about the Arab world” (Khalisah, personal communication, April 19, 2011). She added that her own experiences of learning from others had been personally meaningful:

Since my childhood, I was able to learn from other cultures, like: Chechen, Turkish and Russian. So wonderful to be able to talk and learn from people from other cultures, this may help you to be open minded, with more knowledge, learning how to start good relations with people from other cultures. Learn the language, their habits, about their culture – history. I think this is wonderful. (Khalisah, personal communication, May 2, 2011)

Katya stated that her students were able to learn a great deal from others:

My students learnt a lot about other cities and schools in other countries. Particularly it was interesting for them to learn about Indian students and schools... Students were happy to receive new photos, presentations and articles about cities and schools from other countries. (Katya, personal communication, June 13, 2011)

Catherine shared a story about her grandson which expressed the openness with which children often approach others:

Catherine: [My grandchildren] have met friends from all over the world, as a matter of fact, when we go to Taiwan next month my grandson’s coming with me, and he’s going to connect up with...Jamey. They met in Slovakia.

Holly: (laughs)

Catherine: ... Yeah, they met in Slovakia, standing in line to get food, uh, they started communicating, they don't speak each other's language, he only spoke Chinese, and of course [my grandson] only spoke English, but that whole week they were together, they were the best of friends, they would, they developed some kind of signaling between each other, to figure out what to do and so it was amazing. We were just amazed about that so we'll be anxious to see what happens when they get together this time. They're like 20 years old now.

Sharing Cultural Information and Understanding

Participants shared experiences during which they and their students had shared cultural information and understanding. These experiences were critical to their conceptualization of what global learning was and what their goals were in engaging in it. Garima shared a connection that she had made with a school in the United States and how they would be able to learn about festivals from each other:

...I have been working with this person... from New Jersey... I really admire him so much, so we have thought about, you know, celebrating festivals. He's going to celebrate Diwali in his school, and we are going to celebrate Thanksgiving and Halloween, and these are all going to be done by primary students... and we would be inviting people from the US Embassy, and all that which would really give that international color, and that, that's how you can really teach students about festivals, rather than

reading about it in a book in class. (Garima, personal communication, July 2, 2011)

Garima added that her goal for her students in becoming more globally minded was to share experiences and information:

Garima: The more you collaborate, the more you talk, the more you do projects, the more you communicate... the more you learn.

Holly: Um hmm. So what do you think is the best way for teachers to help children become more globally minded?

Garima: Collaborate more and more, practice the three c's that I talk about: communicate, collaborate, and cooperate, and of course this makes you a better human being.

Khalisah shared that global education should focus on learning about others. She stated, "...I think it's only about making some friendships and learning about other cultures in a friendly atmosphere, and to improve your skills." She then added, "My students may exchange messages with students from other cultures, I always encourage them to do that, because this will help them improve their skills in the language they're using and will learn more about those cultures so to understand them better" (Khalisah, personal communication, April 19, 2011).

Katya reflected upon her own personal experiences and the insights she brings to her classroom. She commented:

While travelling to other countries and communicating with different people I saw that all the peoples have different mentality, and if we want to have successful communication with them, we must observe their rules

for communicating and respect their view of life. At my lessons I often mention it to my students. (Katya, personal communication, May 2, 2011)

Garima shared a similar view, stating, “There is diversity everywhere but human beings are still the same and you can learn from everybody, wherever he lives, whether he’s in Africa, or in Asia, or in Australia, or in America. There’s [sic] so many things to learn that until and unless you collaborate you can never do that” (Garima, personal communication, July 2, 2011).

Hannah shared the impact that global learning had had on one of her students. “[Student] can’t conceive of the world outside of his house. He replied to a post once by talking only about himself. Then, I made him reply to what others had written. It was one of the first times he was able to see life from another perspective” (Hannah, personal communication, June 12, 2011). Later, she told a story about an African-American student who discovered that the internet was age and color blind. When corresponding with a student from South Africa whom the student assumed was Black, “...she corresponded with this person for an entire year, before she discovered that the person was Indian-African... I don’t think the other person knew what she was, either. They kind of had the stereotype that, you know, she was a blonde girl in California with a surfboard” (Hannah, personal communication, June 22, 2011).

Dealing with Prejudice and Discrimination

Participants discussed being faced with issues of prejudice and discrimination while engaging in global learning activities. Often these issues originated with the participants’ colleagues. Hannah shared:

Hannah: ...A lot of teachers come in with the attitude, I hate to say it, very

patronizing, like, “Oh, we’ll help out these poor people in the other countries, let’s, let’s give them, you know, let’s give them money, let’s give them our superior expertise,” and then they find out, uh-oh, it’s the other way around...

Holly: Oops, yeah.

Hannah: Yeah you kind of have to have a whole new version of who you are if you are really going to accept them into your global community... and I’m not... that’s the part I like but it’s a shocker for some people not to be superior.

Hannah shared another experience in which a stereotype was applied to her inner city American students:

Hannah: I had some people in India once who were... really insulted that my parents would not just pay for the students to come over to Delhi to visit. How could they not do that for their children? And I said, “Well, actually, no, they’re kind of struggling to have breakfast.”

Holly: Right.

Hannah: I don’t know, they went, “What?” I said, “We’re living in this rich country and our students live in poverty,” and they were like, jaws on the floor.

Finally, Hannah stated that fighting issues of discrimination and prejudice has always been a personal commitment for her living in San Diego, California. She has worked on border exchanges between the US and Mexico since high school:

So yeah, I've always been committed to mixing it up and making people aware of the fullness of life on both sides of the border, because even here, where we live it daily, where 40% of our students have roots in Mexico, there are incredible stereotypes. So it's just not, to me, ever done or simple to mix people and have people really hear what's important. (Hannah, personal communication, June 22, 2011)

She shared that she wanted, "The equality of the internet to prevail and not see places or schools 'ranked' by economics or academic excellence" (Hannah, personal communication, June 12, 2011).

Tara experienced religious prejudice from a parent when engaging in a global learning activity in her Catholic K-8 school, and shared how that experience motivated her to work even harder to reduce prejudice. She expressed in an interview:

Tara: ...at the beginning of the year, my first global project, it was the Flat Classroom... and I sent out permission slips for parents to sign, and I got one back from one of the parents, saying, "I don't want you or the school, or the Diocese, to be involved in this. This person is from Qatar, and they are Muslim, and I don't want to deal with them." And the main part of it was, I had a talk with my principal, with my pastor, and they were like, "Go for it," you know... I just that... getting over that... hill. There's not, there's nothing, I'm not doing anything bad.

Holly: Right, right.

Tara: And he's like, "Well, what about the religious aspect?" and I'm

like, “Well, everything’s religious.”

Holly: Um hmm.

Tara: And... just, just people. We’re just people.

Holly: Um hmm.

Tara: I don’t know, but... so I think that kind of spurred my, my
motivation and passion a little more.

Garima stated that being involved in global learning projects had changed her personally. “Yes, it has made a very big difference. I am a totally different person altogether. I am more understanding and tolerant” (Garima, personal communication, June 13, 2011). She added during an interview, “We cannot be very prejudiced,” and that a person is a global educator if he has, “basically the willingness to learn, to observe, to make friends” (Garima, personal communication, July 2, 2011).

Personal Growth

Participants shared accounts of ways in which they and their students had experienced personal growth due to interpersonal and intercultural connections. Catherine shared the story of a student who left home for the first time and traveled with her to Africa for an iEARN convention.

Catherine: Uh some of these, well the first thing that you have to
understand is that most of these kids were out of the projects
downtown,

Holly: Ok.

Catherine: But I would say that from, first of all, I’ll tell you the first boy

that went. He was a 10 year old, had never been out of downtown Chattanooga. Never. Never been on a plane, never been on a train, never been on a boat, um... he got to go from Chattanooga to England, and from England to South Africa.

Holly: Wow.

Catherine: and his mother actually got to go with us, um... she was paid by the Public Ed Foundation, and iEARN gave a scholarship to allow this boy to go. And uh, she said, “[Catherine], I took a little boy to South Africa and came back with a young man.”

Garima shared that she had personally grown and changed as a result of her global learning experiences. She wrote:

I have made wonderful friends all across the globe. I now seriously believe in the saying “The world is a global village”. I have become more patient and tolerant. On a very personal note, I am a very strict vegetarian. I would find it very difficult to share the same table with non vegetarians. But global education has taught me to be tolerant and not discriminate. Now, I have no hassles in sharing the table with anyone, although I am still a staunch vegetarian. (Garima, personal communication, May 2, 2011).

Garima also shared that she was fulfilling a dream to be an ambassador by participating in global education. In an interview she expressed this saying:

...somewhere deep within I had this passion to visit places and, as I said, be the ambassador, and being the global educator, I think I am fulfilling

that ambition of mine because I have been visiting places, I have been promoting my country and my school, and so in a way, I am the ambassador of my country and my school. (Garima, personal communication, July 2, 2012)

Hannah shared the sense of personal satisfaction she felt from the connections she had made:

Hannah: It's just been so personally rewarding for me to get to know the people,

Holly: Um hmm,

Hannah: Because I do, I've had two of them from Ghana and Uzbekistan come and eventually stay at my house, and one of them has, uh no, others of them have become US citizens.

Holly: Wow.

Hannah: So it, it, I have just maintained these ties and enjoyed the people so much.

Khalisah discussed ways in which her students had grown from the exchange, and mentioned one student in particular who had become especially engaged in the project.

She wrote:

I can say that my students enjoyed talking to the other students using languages other than Arabic, and enjoyed searching the net to read about cultures. For example, one of my students... she's a talented student, she spent her time writing messages to students from USA, Sierra Leone and Russia, preparing cards to send by mail, searching the net to read about

those cultures, and improving her skills in languages by using dictionaries and the internet to find meanings of words or to find the suitable words to use in her messages. (Khalisah, personal communication, June 13, 2011)

Activism

A third overarching theme which emerged from the data was the importance of activism and global citizenship to the participants. Several were personally heavily involved in humanitarian and civic projects, and they encouraged their students to be active as well. All of the participants joined iEARN independently and are the only teachers in their schools participating in learning circles. Tara explained, “I’m not sure how I found out about iEARN – I might have just googled global projects and found it a few years ago – I believe that’s how I found it!” (Tara, personal communication, May 12, 2011) Garima had a similar experience. “I am already a member of epals... I wanted to expand my horizon. Meanwhile, my friend from Indonesia... told me about iEARN. I felt this was an opportunity to further my horizon, hence I joined iEARN” (Garima, personal communication, May 2, 2011). Khalisah also joined iEARN independently. “When I joined world links class, I saw the name iEARN on the book, so I went to the net to start searching about iEARN, and then I joined it” (Khalisah, personal communication, May 2, 2011). Katya heard about iEARN from a colleague at a conference:

There a teacher from a Belarusian district centre made her report about their experience from participating in iEARN projects. I got very interested and decided to participate in them as well. Also, in addition to lessons I wanted to give my students something more, and they enjoyed participating a lot. (Katya, personal communication, May 2, 2011)

Catherine was an example of a teacher who was extremely dedicated to social justice and global engagement. Following a conference in which she met a teacher from Nepal, she decided that the two of them should work together to found a non-profit organization to aid poor schoolchildren in Nepal:

Catherine: So he... he went up there with a group of his teachers from [his school in Kathmandu]. And they took photos and talked to the headmaster and stuff like that, Um, he talked to me about it and showed us, and I said, "You know, this is not right."

Holly: Right.

Catherine: This is an elementary school, with dirt floors, no lighting, no electricity, no running water, no supplies, etc. It was pathetic. It was about the same time that Greg Mortensen's book came out about Three Cups of Tea? In Pakistan? And I said, "If they can do it in Pakistan, we can do it in Nepal."

Holly: Um hmm

Catherine: We both started these non-profits, and uh, we raised money to send over to them, we just sent him the money, nobody was paid out of the foundation, he goes and buys all the supplies, and he arranges with his teachers to haul them up the mountain, and it is literally trekking up the mountain. So, uh, this time I got to go with him, I got a grant from Kappa Kappa Iota, and, um, we went out, trekking up that mountain. ... some of the pictures. But the kids are

just wonderful. They're just poor kids. It's based on a caste system and it's like the lowest caste.

Holly: Right

Catherine: To me they're just kids.

Catherine later spent a month in Nepal working with the students at the school, and the two teachers have established a scholarship fund so that students from the village can attend a private school in Kathmandu.

Hannah was also dedicated to social change. She began early in her teaching career by arranging cultural exchanges between her American students and their neighbors in Mexico. She told the story of her first trip to Mexico with students:

Hannah: I actually took a class of students from one of my high schools years ago on a school bus down to Tijuana and unloaded at the school there. I made that contact by knocking on the door,

Holly: (laughs) We're here! Can we come in?

Hannah: ...Well, I had knocked on the door previously, but literally walked in and found the school that was closest to the border, knocked on the door, and said, "Would you like us to come down?" and they said, "Sure."

Hannah was also an integral part of writing her school's vision and mission statements, which reflect a commitment to global education. She highlights activism in her high school students' projects. She shared this process in an interview:

Hannah: We start into the research, and they usually do internships related

to their project varies a lot...and then a lot of them just do community based events, like one of them put on a dinner for 400 homeless people,

Holly: Oh, wow!

Hannah: Yeah, and a number of them, since we're K-12 speak to the younger children... and we make it global in some way by communicating with people in other countries on the topic.

Participants also encouraged their students to be global citizens. Hannah stated that her students had to do an action oriented program with a global implication during their senior year. Catherine shared a project that her elementary students had initiated:

I was in the computer lab... and we were doing research on weather. And it was shortly after that that the tsunami hit in Indonesia. And two of the kids that were in that afterschool program... they took it upon themselves to go and make a decision that they were going to do a fundraiser for the victims... One week later, they'd raised \$5000 dollars. (Catherine, personal communication, June 28, 2011)

Garima emphasized that teaching her students social responsibility was a critical aspect of her involvement. "[Global education] means making my students more responsible not only towards their locality, country but also the world on the whole" (Garima, personal communication, April 19, 2011).

How Do These K-12 Educators Teach for Global Learning?

The second research question focused on how K-12 educators who participate in telecollaborative global learning projects teach for global education. More specifically, I

explored how teachers prepared themselves to teach for global learning, their objectives in teaching for global learning, and the primary means for delivering instruction. Three major themes emerged from the data. First, teachers had no formal preparation or training specifically in the fields of global education and global learning. Instead, all of their training came from related coursework such as language study, online courses sponsored by iEARN and other web based organizations, and personal interest and experience. As a result, the participants all displayed individuality and willingness to pioneer global learning programs within their schools. Second, teachers expressed that their primary objectives in engaging in telecollaborative learning projects were to widen student perspectives and global engagement and motivate students and teachers to higher levels of performance. Finally, teachers expressed the benefit of ICT use to global education, and discussed the interconnectedness of ICT use with global education and global learning.

Preparation for Teaching for Global Learning

None of the participants were social studies educators. Instead, they represented the fields of library sciences, technology, and language learning. They expressed that they had no formal training to teach for global learning. While all but one had travelled outside their home countries, this did not emerge as a cause of the participants' interest in global learning, but rather, as a result of it. Instead, participants discussed other training such as foreign language education and online seminars, as well as personal experiences and interests, as preparation for teaching for global learning. Garima wrote:

I haven't been trained for global education. I started it for my own personal growth. I was inquisitive to know about schools in other

countries, hence I stepped into global education. My attending the AEC-NET conferences have [*sic*] helped me prepare to teach for global education. (Garima, personal communication, May 2, 2011)

Hannah pointed to her background in language learning and teaching in helping her prepare to teach for global learning:

As a Romance Language major and Anthropology minor in college, I lived in international dorms, visited and corresponded with native speakers of those languages, and studied literatures and cultures extensively. I spent four semesters and summers abroad before and after starting to teach high school. I think that world language study is a fast-track to global education. (Hannah, personal communication, May 2, 2011)

Catherine discussed her background in international business and marketing as a knowledge base for teaching global education, and added that she had used her experiences with iEARN to inform her teaching:

I have not had any official training for global education. I have always believed due to my international marketing experiences that it was only natural for students to learn about their peers around the globe. Most of my experience has come about through attendance at the IEARN Conferences and working with the Learning Circles and Early Peoples Symbols Projects. (Catherine, personal communication, May 2, 2011)

Finally, Khalisah expressed that her background in global education was acquired almost entirely through ICT and personal inquiry:

About global education: I helped myself by using the internet, reading, searching, trying to talk to other teachers, friendships, exchanging work... Then iEARN courses like: creative art, language arts, also the forums at iEARN gave me the chance to meet other teachers from all around the world. All these things helped me to improve my skills, enrich my knowledge so to help my students to improve their skills and have better learning. The internet & YouTube (by using them in the right way) are wonderful places to find good things for your students. (Khalisah, personal communication, May 2, 2011)

This spirit of individuality and pioneering carried over into the participants' work in their schools. All of the participants expressed that they were the only educator in their schools who engaged in learning circle projects, although several worked with other teachers in their buildings in partnerships and expressed a desire and a plan to get others involved. Khalisah explained that in her school, she was completely independent and received no support from the administration or community. "In my school, nothing to be mentioned about support, I'm working with my students, without asking for anything" (Khalisah, personal communication, June 13, 2011).

Tara began teaching for global learning out of personal interest and motivation. She stated in an interview, "You know, I um... just started joining things, and I saw it, and I wanted something global. And I wanted to reach out, and get my kids involved, so... that's basically how it started" (Tara, personal communication, June 29, 2011).

Hannah, too, taught for global education for personal reasons, "My colleagues accuse me

of wanting to create world peace one match at a time. They are partly right” (Hannah, personal communication, April 28, 2011).

When asked how other teachers could be motivated to engage in global learning projects, Catherine pointed out that many teachers have difficulty due to the limitations of time, regulations, and equipment. She explained, “We need some creative [teachers] to go beyond the restraints.” She later added that she was working with some teachers to expand the program within the school. “So next year when [the teachers] start, they’re going to start right out Skyping. I showed it to them, I introduced it to them, and they had an experience with it, but now they’re ready to go. So I think they’re very excited about working with their peers, and making global projects” (Catherine, personal communication, June 28, 2011). She also explained that many teachers were willing to participate if they had a leader who would take on primary responsibility:

You know, [teachers will] let you come in, like when I was at [school name] I’d work in the computer lab and I would do the learning circles for all the grade levels. And the classroom teacher didn’t care because she knew I was doing it all. (Catherine, personal communication, June 28, 2011)

Objectives in Teaching for Global Learning

Widening Student Perspectives and Global Engagement

Katya discussed the importance of widening student perspectives in her definition of a global educator:

I think a person becomes a global educator when he or she gets interested in teaching children not only the realities of their country, but in widening

the outlook by telling about other countries, in particular about their people's way of life, culture and mentality. (Katya, personal communication, August 24, 2011)

Catherine expressed a similar idea in her definition of global learning, "It means gaining an understanding of another culture and how similar and different it is from our own" (Catherine, personal communication, April 19, 2011).

In discussing her motivation for engaging in telecollaborative learning projects, Garima also discussed widening student perspectives as well as her own:

I... would like to describe myself as somebody who loves to explore new things, somebody who wants to know what's happening on the other side of the world, not be restricted to the little community which I cater to, hence, you know that curiosity and that eagerness to know more about people and to explore things, I bring children to this field of global education. (Garima, personal communication, July 2, 2011)

Catherine explained that she worked with her students to help them understand and appreciate language differences:

Catherine: ...like the first time they experienced say, letters that might come in from Russia... You know, the wording might not be correct, and I said, "You have to remember, this is not their first language."

Holly: Right.

Catherine: "Now think about if you were writing a letter in Russian to

someone. Do you think yours is going to be perfect?” and they said, “Probably not.” And they got over that attitude, you know.

Catherine’s definition of global education also expressed her desire to widen student perspectives. She explained that global education means, “...connecting with peers around the world with an appreciation of cultural differences. It also provides an opportunity to share resources and technology innovations” (Catherine, personal communication, April 19, 2011). Hannah added that her goal in doing learning circles was to “...ignite student interest in others and to widen student perspectives. Our first [group of participating] students thought we were the poorest people on earth. Their world was the block where they lived. We do not see as much of this anymore” (Hannah, personal communication, April 28, 2011).

Motivating Teachers and Students

Participants viewed telecollaborative learning projects as powerful tools to motivate colleagues and students to higher levels of performance. Tara explained that this increased motivation was a direct result of teachers and students having a real audience for their work. “It has made a tremendous difference in teaching. There’s more effort on myself and the students to create something better. When people other than the teacher is [*sic*] looking at their work, the students (and myself) are more aware and do better” (Tara, personal communication, June 11, 2011). Katya agrees that these projects have made a difference in her instructional practices. “My teaching has become deeper, now it is above textbooks. It stresses the importance of English as a global language, lingua franca for many people and a means to get new knowledge” (Katya, personal communication, June 13, 2011).

Khalisah expressed that learning circle projects were powerful motivators for her students. “I told them that they will be able to improve their skills in languages and talk to other students, to have discussions about many subjects, they liked that. They’re so interested in using their emails and receive messages from others” (Khalisah, personal communication, June 13, 2011). Catherine added that telecollaborative projects have positively influenced her students’ academic skills. “. . .it has improved their writing skills a lot, they also had to do some interviewing this time, learn how to conduct an interview” (Catherine, personal communication, June 28, 2011).

The Interconnectedness of Global Education and Global Learning with ICT

All of the participants were engaged in telecollaborative learning projects which involved communication with partners using ICT. Consequently, they viewed technology as integral to the teaching of global education. Tara explained, “Global education is the ultimate learning experience. With simple tools using the Internet, Skype, and Google Docs, students can work together simply and effectively” (Tara, personal communication, April 25, 2011). Garima’s definition of global education included technology. “[Global education] means connecting classrooms in cyberspace. It means making my students more responsible not only towards their locality, country, but also the world on the whole” (Garima, personal communication, April 19, 2011).

In an interview, Garima also discussed the fact that technology has changed the way she and her students view the world, and the way she teaches for global learning. “It’s now a global village. . . it’s because of technology. . . now it’s not difficult for you to travel, to visit places, and of course there’s the internet and there are online projects, all these things contribute to being globally minded” (Garima, personal communication, July

2, 2011). Hannah also commented on the changes ICT have brought to the field of global education, and added that these developments have changed how we educate students:

Global learning is the future of education. I think that countries will continue to work together through schools. These pioneer days of international exchanges may seem pretty primitive in just a few years. For me, global learning has been a pleasure and a gift, since I remember other times. (Hannah, personal communication, May 2, 2011)

When asked why she thought telecollaborative projects were important, Tara responded this way:

Tara: Well, it's a lifelong skill... it is in our curriculum, it is in our standards, I should say. Something in our standards, something we should be doing.

Holly: Global education is, or the technology is?

Tara: Both... Yeah, they're both in... we do need to connect with people from... wherever... it's... how to be a digital citizen.

Katya summed up her thoughts about how ICT has impacted her teaching this way, "It is great to have such an educational resource [*sic*] both for students and teachers of English... The idea to create such a resource [*sic*] does make a change in the world!" (Katya, personal communication, June 13, 2011)

How Do These K-12 Educators Make Decisions About Pedagogy and Curricula When Teaching for Global Learning?

Very little is known about how educators who teach for global learning make decisions about curricula and pedagogy, and what factors facilitate or serve as barriers to

this process. In this study, participants unanimously agreed that global education was not a part of their curriculum, but that they were passionate about it and so they found ways to integrate it as the content when teaching other standards. In most cases, teachers were able to do this during the school day, but a few engaged in telecollaborative learning projects after school hours. All of the participants discussed the fact that they were the only ones in their school who did learning circles, though most also mentioned their desire to involve other teachers. They mentioned several factors which facilitated teaching for global learning, namely, administrative support, enthusiasm from students, and the safety and reliability of using websites such as iEARN that are designed for educational purposes. They also discussed several barriers to teaching for global learning: insufficient time, limits on technology use in the schools, and lack of teacher expertise and confidence.

Integrating Global Education into the Curriculum

Participants explained that global education was not part of their curricula, but that they integrated it into their curricula in order to teach certain standards and skills.

Hannah expressed her process this way:

I use the learning circles to promote the library curriculum... In fact that is how I teach the skills. If we have a partner in Ghana, we may look at Ghana in the encyclopedia or online. We may compare sites about Ghana. Or, if we have to tell about our town, the format may be a forum or a website or a [PowerPoint], etc., depending on which skill I have to teach.

(Hannah, personal communication, April 19, 2011)

Catherine also explained that she integrated learning circle content into normal classroom activities. She explained in an interview:

When I was in the classroom, I would make centers, and their writing assignments tied to the projects I was doing, you know, and anything that I was doing in the learning circles, I would tie it to the language and I would tie it to either the social studies and/or science project that I was studying.

(Catherine, personal communication, June 28, 2011)

Garima engages in telecollaborative learning projects outside of school hours, choosing projects that are personally motivating and interesting for herself and her students. She stated that global education does not fit at all with her prescribed curriculum. “Indian education system, unfortunately, doesn’t give me any scope to fit learning circles into my curriculum, but as an educator I feel it is a must for me to go that extra mile for my students...” She later added that the greatest barrier she had to engaging in teaching for global learning was “The fact that it is not part of our school curriculum... It is extra bit of work for me as well as my students” (Garima, personal communication, June 13, 2011).

This type of curricular innovation required participants to show creativity and independence. Tara explained that the students were receptive to new ideas and techniques. In an interview, she stated:

It’s not easy. And you know, I think you need to be creative, try new things. I try new projects as often as I can. New tools, and you know, I try them with the kids. And they’re easy, they’re like, “Oh, yeah, let’s try

that.” They’re fine with it. It’s the teacher [who has difficulty]. (Tara, personal communication, June 29, 2011)

Hannah faced similar issues in that teachers were not always cooperative or willing to commit to global learning projects. She expressed how she approached this issue in an interview:

What I tell them is, “I sure don’t know how to do everything, nobody knows how to do everything, you just walk up to the door and somebody else will open the door for you.” You just smile, and they do, and it’s really been fabulous that way for me. (Hannah, June 22, 2011)

Facilitators for Teaching for Global Learning

In spite of the difficulty of incorporating global learning projects into existing curricula, three factors emerged as themes that facilitated the integration of telecollaborative global learning projects for participants. These three factors were support from administration and other school personnel, enthusiasm on the part of students, and the safety and reliability of using websites like iEARN that are designed for educational purposes.

Administrative Support

Garima stated that the primary factor in making it easier for her to engage in learning circle projects was, “The management of my school, especially my Chairman, and my Principal has been very supportive” (Garima, June 13, 2011). Tara agreed, saying in an interview, “Well, I have a principal that lets me try anything, so that makes it easier” (Tara, personal communication, June 29, 2011). She added, “My principal encourages global education. The homeroom teachers make extra time available if I need

to finish a project or Skype with a classroom” (Tara, personal communication, June 11, 2011).

Hannah was an integral part of writing her school’s vision and mission statements to reflect a global focus in her K-12 magnet school. She explained in an interview that the school community was very supportive of the move to a global education theme, and that it is a facilitator in her teaching for global learning:

Well, number one in our school is that at some point when we were redesigning the school we got named a global school, so we put that in the mission statement, and we go back to the mission and the vision constantly, and I post the vision and the mission, which says we are global learners... (Hannah, personal communication, June 22, 2011)

Katya had a similar experience with administrative support. She wrote, “Our [school] gladly supported my idea to participate in learning circles... and after the circles were over I was asked to write an article for our Lyceum web site to give our participation a wider coverage” (Katya, personal communication, June 13, 2011).

Enthusiasm from Students

Several participants discussed the enthusiasm on the part of their students as a facilitator for engaging in global learning projects. Tara described her students’ excitement in realizing that they could work with students around the world on their projects:

I think I like it when we Skype with a classroom, and they just like, “Wow, these people are in North Carolina or China, we connected with China... the kids came in early in the morning at 8:00 before school

started, and it was 10:00 their time, you know, I think just, just to see that, even though they're far, we're close... So I think those, those connections are big a-ha moments for my students... And then when they see those connections, they just go, "Wow. We can actually work with these kids."

(Tara, personal communication, June 29, 2011)

Catherine also shared her students' excitement with experiencing global learning. In an interview, she shared:

What makes it easier? Uh, the kids are receptive to finding out about other cultures. You know, realizing that, these kids eat pizza, I eat pizza. Hey, they have seasons, I have seasons... Hey, we look alike, or we don't look alike. You know they're very curious about their peers. It's not like they get to meet someone from Botswana every day. (Catherine, personal communication, June 28, 2011)

Safety and Reliability of Educationally Designed Global Learning Websites

Participants discussed educationally designed websites such as iEARN as being an important factor in facilitating their teaching for global learning using ICT. Hannah explained that when she first began using ICT based global learning projects, "My... problem was finding safe and reliable partners online." She then added that she chose learning circles because of their safety and reliability:

I found that with the learning circles, all students received answers--no more depending on one student somewhere to respond. Also, I liked the academic nature of the circles, so I did not have to worry about content or

inappropriate posts. So [learning circles] became my preferred way to do epals. (Hannah, personal communication, April 28, 2011)

Barriers to Teaching for Global Learning

In spite of their enthusiasm and personal commitment to global learning projects, participants described several barriers to engaging in them. Three themes that emerged as barriers were insufficient time, limits on technology use in the schools, and lack of teacher expertise and confidence.

Insufficient Time

Lack of time was a very common response from participants when asked what factors made participating in learning circles difficult. Some participants reported that, because of the nature of their position within the school, they had limited access to students each week. Catherine explained, “The problem is that [the students are] only there for 2 hours on Friday... so there wasn’t really time to get them set up on Skyping” (Catherine, personal communication, June 28, 2011). Hannah agreed, “Time I spend varies. I’m a library-media teacher, so I see elementary classes about 1/2 hour each week. I have to pay attention to what the classroom teacher’s constraints are” (Hannah, personal communication, April 28, 2011). Garima explained that lack of time was especially difficult in her school, where global learning projects are after school activities:

And any kind of extra work is not, uh, acceptable or not... something that teachers really enjoy. Especially when they have their families... it’s too demanding and then they have little kids maybe, so they cannot sit at the computer, and maybe do all these... and of course we have these huge classes, wherein we have around 42, 45 students in each class which

means we have so many notebooks to evaluate, and we still have the examination system wherein we have papers, papers to evaluate, so the evaluation process just doesn't end, anyway. (Garima, personal communication, July 2, 2011)

Catherine agreed that classroom teachers felt overwhelmed by the pressures of teaching all of the standards and improving student achievement on standardized tests.

Catherine: But you know I think some of our teachers are just so overwhelmed.

Holly: Um hmm.

Catherine: They just can't take on another thing.

Catherine added that she personally led global learning projects and managed online postings to take some of the burden off of classroom teachers (Catherine, personal communication, April 19, 2011). Tara's colleagues responded similarly. "[They asked], 'How am I going to fit this in? I don't have time!' Time is another... I'm sure you've heard that before" (Tara, personal communication, July 29, 2011). Hannah concluded with this observation, "I also re-discovered the big factor – that other teachers find the amount of reading required to be too much, even with the big interest and collaboration payoffs! That is why so few of them join me" (Hannah, personal communication, June 12, 2011).

Limits on Technology Use in Schools

While all of the participants expressed that their access to technology was adequate, most also described limitations on its use imposed by their school or district as barriers to engaging in global learning projects. Catherine was one participant whose

school originally blocked the use of Skype. When asked if she was able to use Skype or other programs to communicate with partners via live, face-to-face communication, she responded:

This is something I wish to do but our school district does not allow this.

However this year we did receive permission to use Skype and to date it has not been set up correctly through the district system. I have brought my home computer to school to introduce Skype to the students who were able to talk to a teacher from Morocco who visited the school this year.

They loved it! (Catherine, personal communication, April 19, 2011)

Catherine added that the school board and district administration would need to be convinced of the value of allowing students to communicate live using the internet. She stated in an interview, "...I think it's going to take time to get involved at the district level, with the school board members, to get them to see some of the finished products. It's going to be a battle" (Catherine, personal communication, April 19, 2011).

Tara viewed parents as both an asset and a barrier to using ICT in the classroom. Some parents, she explained, did not see the value of using technology and wanted the school to focus more on traditional skills. On the other hand, she felt that some parents might be an asset in convincing the school administration:

...there are some parents that are real tech savvy, and they're excited that their kids are doing this, it's just, they need to start putting the pressure on administrators and school board members, you've got to show some...

value and outcome. (Tara, personal communication, June 29, 2011)

Teachers, too, need to be convinced to use technology in their classrooms. Garima expressed this as she explained some of her colleagues' reluctance to integrate ICT into their programs:

...the fact that the students can misuse technology also prevents them from experimenting with, you know, all the students. So somewhere we have to tap the potential of the teachers and help them to drive away that fear from their minds. There are plusses and minuses everywhere.

(Garima, personal communication, June 2, 2011)

Lack of Teacher Expertise and Confidence

All of the participants were the only educators in their buildings fully involved in teaching for global learning using learning circles. When asked why this was the case, they responded that, in addition to insufficient time, lack of teacher expertise and confidence were barriers. Tara explained that some of the teachers in her school were afraid to try new things:

Holly: So... with the other teachers in your building, um, the ones who don't get involved in global projects, or global ed, at all... is there a reason why they don't?

Tara: Um, well, I think they don't like change. They like their, their routine. Um, I think they're afraid. I know a teacher said, "I'm deathly afraid of technology." And I don't think it's the... I think they would do fantastic and it would be fine, and I think they're stresses as well of getting everything in..."

Hannah explained that some teachers did not understand the value of global learning projects. They considered global education to be a nice extra in the curriculum, but not something necessary or required:

Hannah: As far as the other teachers, I guess the theme is, we've got to prepare our students for tests and meet standards,

Holly: Um hmm, I totally understand.

Hannah: And "What *are* you doing? I know you're having fun out there, but... *we're* serious."

Hannah added that she felt that some teachers might feel intimidated by others' skills:

Hannah: You know it may actually be an intimidation, because once we're in the larger pool of learners and the larger pool of teachers, there are going to be people that are more advanced than we are, there are people that are not as advanced as we are. Now we just have to accept that, grasp where we are and keep swimming...

Holly: Um hmm.

Hannah: That's what I liked, was that there was somebody out there that was more literate than we were.

Several participants explained that their colleagues were uncomfortable with the less-structured approach and how to fit it into their curricula. Some teachers were unsure how to deliver and assess instruction while using global learning projects. Tara explained:

Tara: ...and when the teachers did the landmark... one of the teachers

was like, “This is great but I don’t know how to grade this. We didn’t grade it.” They didn’t grade it!

Holly: All that work!

Tara: So, you know, I think that’s something that, um, that needs to be worked on.

Holly: What do you think would be the best way to approach that?

Tara: Experience... trying it out.

Garima experienced all of these barriers in her work with her colleagues, but was optimistic about seeing a positive change:

Not many people do [global learning] projects although now, um, they’re getting attracted to it. And this year I and my principal have taken it up as a challenge to coach them, to make them more techno savvy, I must say, because they are still a little skeptical about uh, internet and the computer... and so many other things also, lack of time, and basically what I feel is that there is that fear of using technology. (Garima, personal communication, June 28, 2011)

Hannah adds that teachers will continue to engage in global learning projects once they have had a positive experience with them. “I think that the first thing, is to just have some fun with it. Once they’ve had the fun, they’ll do it again.” She added, “It’s just enriched my life so much, hopefully they’ll see it on that level, as something that can enrich their lives” (Hannah, personal communication, June 22, 2011).

Summary

This chapter presented data collected to answer the three research questions:

1. How do K-12 educators who engage in telecollaborative learning projects conceptualize global education?
2. How do these K-12 educators teach for global learning?
3. How do these K-12 educators make decisions about pedagogy and curricula when teaching for global learning?

Because little is known about how teachers conceptualize global education and how they teach for global learning, the purpose of this study was to explore these topics in a qualitative case study. The six participants were chosen by selective sampling and represented three US states: California, Illinois, and Tennessee, and three foreign countries: India, Belarus, and Jordan. In spite of the differences in schools, curriculum, teaching position, language, and culture, clear common themes emerged regarding teachers' conceptual understanding of global education and their curricular and pedagogical decision making in teaching for global learning.

The first research question explored how participants conceptualized global education. The data suggest that participants frame their conceptualizations of global education around their own experiences and values, and around students' needs and experiences. In particular, three patterns emerged: the importance of personal connections, the development of interpersonal and intercultural understanding, and activism and helping students to develop an understanding of themselves as global citizens.

The second research question explored how teachers teach for global learning. Three results emerged from data analysis. First, teachers had no formal preparation for teaching for global learning and relied instead on their own experiences and some online

training. Second, teachers expressed that their primary objective in teaching for global learning was to widen student perspectives and motivate students to greater levels of academic achievement. Finally, participants expressed the benefit of ICT use to global education, and stressed the interconnectedness of ICT with global teaching and learning.

The third research question explored how educators make decisions about curricula and pedagogy when teaching for global learning. The data demonstrated that none of the participants' official curricula included global learning; instead they used the content and skills of learning circle projects as an alternative to meet standards and skills. Several factors facilitated this process, namely, administrative support, enthusiasm from students, and the safety and reliability of using educationally based web sites for global learning projects. Finally, the data revealed several barriers to teaching for global education, namely, insufficient time, limits on technology use in the schools, and lack of teacher expertise and confidence.

The final chapter of this dissertation research, Chapter 5, will present a discussion of the findings. This discussion will be presented within the context of Hicks' (2003b, 2007b) four-fold framework for global education. This final chapter will conclude with the implications of this study for educational policy makers, teachers, and teacher preparation programs, a review of the limitations of the study, and suggestions for future research.

CHAPTER 5

SUMMARY, RECOMMENDATIONS, AND CONCLUSION

Introduction

The present study explored the ways in which teachers who were engaged in telecollaborative global learning projects, in this case specifically learning circle projects through www.iEARN.org, conceptualized global education, how they taught for global learning, and how they made decisions about pedagogy and curricula when teaching for global learning. In Chapter 4, I outlined major themes that resulted from data analysis. In this chapter, I will first provide an overview the study. Next, I will discuss the results in the context of Hicks' (2003b, 2007b) framework for global education, their significance and implications, including how they contribute to the existing literature on global education and global learning. Finally, I will discuss recommendations for future research, educational policy and practice, and conclusions.

Summary of the Study

The Partnership for 21st Century Skills (2004), whose framework has been adopted by 16 states, specifies student outcomes in four areas. Two of these are especially relevant to the current study. First, the framework has at its core mastery of core subjects (English, world languages, arts, mathematics, economics, science, geography, history, government, and civics) connected by several interdisciplinary themes such as global awareness and civic literacy. In addition, the framework includes four learning and innovation skills – what the Partnership refers to as the four C's –

critical thinking, communication, collaboration, and creativity (Partnership for 21st Century Skills, 2004). Writing on behalf of the United Nations Educational, Scientific, and Cultural Organization (UNESCO), Pigozzi (2006) emphasized the urgency and essential nature of global citizenship education and global awareness, and asserted that “no single discipline or sphere of activity can solve the problems on its own” (p. 2).

In spite of the call for empirical studies that reverberates throughout global education literature, few studies have examined teacher practice and decision making in the classroom when teaching for global learning. Using the framework of global education research and theory to guide the present study, I examined the ways in which K-12 educators who were engaged in telecollaborative global learning projects conceptualized global education, taught for global learning, and factors that influenced their decision making processes. The six participants for this qualitative case study were selected using purposeful sampling from an initial group of respondents, all of whom were actively involved in learning circle projects through iEARN. This sampling was selected with diversity in mind, as I chose the participants who would best represent various disciplines, teaching experience, experience with iEARN, and geographical locations.

Data were collected through four electronic interview guides, a semi-structured interview conducted using Skype, analysis of participants’ postings to iEARN message boards, and document analysis of school-based literature such as vision and mission statements where applicable. All data were collected electronically. The data analysis process was facilitated by the use of Atlas.ti software. Data were analyzed through Hicks’ (2003b, 2007b) global education framework. Data were first open coded as I examined it

for recurring ideas. I then used thematic analysis and axial coding to further analyze and understand the results.

Discussion

Review of Findings

The first research question investigated the ways in which global educators conceptualize global education. Anderson (1968), Merryfield (1998), and Gaudelli (2003) have pointed out that it is impossible to conclusively define global education because it is conceptualized differently by its practitioners. Thaman (2010) added that such a definition has traditionally been based in western values and may not even be relevant for some educators. In the present study, the themes of personal connections, interpersonal and intercultural understanding, and activism emerged, however each participant's understanding of these themes and the value they placed upon them varied according to their context. Jordanian teacher Khalisah, for example, expressed that while it was beneficial for her students to learn more about and appreciate other cultures, it was very important that she teach partner schools, students, and teachers about her own Arab culture. The American teachers, by contrast, expressed that they were most interested in exposing their students to different cultures and ways of doing things, and frequently mentioned reducing and eliminating stereotypes and bias as a goal. Tara, an American teacher in a Catholic school, viewed teaching for global learning through the context of Catholic education, and expressed frustration at some stakeholders' opinions that global learning was in conflict with their religious views.

All four areas of Hicks' framework for global education are evident in the three ideas that emerged from my analysis of the participants' conceptualizations of global

education. First, the commitment to the creation and maintenance of personal connections demonstrates that the participants value the personal and social skills needed to work cooperatively with others (Process Dimension) and the interdependence between people, places and countries (Spatial Dimension). Second, the importance of teaching and learning interpersonal and intercultural understanding again demonstrates the critical nature of the Process and Spatial Dimensions, and explores the issues of wealth and poverty, human rights, peace and conflict, and the environment (Issues Dimension). Finally, the participants' commitment to activism both for themselves and their students reflects the three dimensions described above, and adds a focus on the connections between past, present, and future, and the need to think critically and creatively about solutions to problems at all levels from local to global (Temporal Dimension) (Hicks, 2003b, 2007b).

In addition, the three ideas found in participants' conceptualizations of global education are reflected in other key global education literature. The first two results, personal connections and interpersonal and intercultural understanding, support Merryfield's (1998) findings that teachers organize their framework for teaching for global learning around their personal and professional contexts. That is, they place their students and themselves at the center and connect global content and pedagogy to student needs and interests. The participants in this study found personal connections between themselves and their students and their partner schools and used these connections to teach for global learning. These two themes also reflect one of Mundy and Manion's (2008) axioms for high quality global education. That is, they show a commitment to the notion of the value of cultural diversity and the importance of intercultural understanding

and tolerance. This theme of activism is also reflected in one of Mundy and Manion’s (2008) axioms, as it discusses the participant’s emphasis on a belief in the efficacy of individual action. Table 2 highlights the connections between the findings of this study, the theoretical framework, and key research literature.

Table 2: Results for Research Question 1 – How Do K-12 Educators Who Engage in Telecollaborative Learning Projects Conceptualize Global Education?

Result	Relationship to Hicks’ framework for global education	Other key research literature
<p><i>Personal connections</i> – Five of the six participants referred to the importance of personal connections in their definitions of global education and global learning</p>	<p><i>Spatial Dimension</i> – Focus on the interdependence between issues, people, places and countries (Hicks, 2007b, p. 24-25)</p> <p><i>Process Dimension</i> – Focus on personal and social skills needed to work cooperatively with others (Hicks, 2007b, p. 25)</p>	<p><i>Merryfield (1998)</i> – Teachers organize their frameworks for teaching for global learning around their personal contexts.</p> <p><i>Ferriter (2010)</i> – Students built impressions based on actual people rather than stereotypes and gained a better understanding of and appreciation for their international peers.</p>
<p><i>Interpersonal and</i></p>	<p><i>Issues Dimension</i> – Focus</p>	<p><i>Mundy and Manion (2008)</i></p>

<p><i>Intercultural Understanding</i></p> <p>– Both a primary objective and a primary outcome of participants’ work</p> <ul style="list-style-type: none"> • Learning from and teaching others • Sharing cultural information and understanding • Dealing with issues of prejudice and discrimination • Personal Growth 	<p>on the exploration of the problem areas of wealth and poverty, human rights, peace and conflict, and the environment, and the solutions to these problems (Hicks, 2007b, p. 24)</p> <p><i>Spatial Dimension</i> – Focus on the interdependence between issues, people, places and countries (Hicks, 2007b, p. 24-25)</p> <p><i>Process Dimension</i> – Focus on personal and social skills needed to work cooperatively with others (Hicks, 2007b, p. 25)</p>	<p>– Teachers expressed commitment to the value of cultural diversity and the importance of intercultural understanding and tolerance.</p> <p><i>Skelton (2010)</i> – The goal of global learning is the common center that links the components together and creates a deeper appreciation of and interaction with others.</p> <p><i>Tye and Tye (1992)</i> – The majority of teachers cited cross-cultural awareness and cultural studies as the primary goals of global education.</p>
<p><i>Activism</i> – Involvement in humanitarian and civic projects both locally and globally</p>	<p><i>Issues Dimension</i> – Focus on the exploration of the problem areas of wealth and poverty, human rights,</p>	<p><i>Davies (2006)</i> – The global citizen is not simply aware of issue, but is willing and able to take action.</p>

	<p>peace and conflict, and the environment, and the solutions to these problems (Hicks, 2007b, p. 24)</p> <p><i>Spatial Dimension</i> – Focus on the interdependence between issues, people, places and countries (Hicks, 2007b, p. 24-25)</p> <p><i>Temporal Dimension</i> – Focus on connections between the past, present, and future, and the need to think more creatively and critically about the impact of local-global issues (Hicks, 2007b, p. 25)</p> <p><i>Process Dimension</i> – Focus on personal and social skills needed to work cooperatively with others (Hicks, 2007b, p. 25)</p>	<p><i>Mundy and Manion (2008)</i></p> <p>– Participants emphasized a belief in the efficacy of individual action.</p> <p><i>Myers (2010)</i> – Students felt that in order to be a global citizen a person must be informed, engaged, and active in the global community.</p>
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The second research question explored how the participants taught for global learning, more specifically, what formal and informal preparation they had, their objectives in teaching for global learning, and their primary means for delivering instruction. The lack of any formal training for teaching for global learning expressed by the participants was not directly reflected in the literature, as no existing studies could be found in which non social studies teachers' conceptualizations and methodology were examined. The participants' goals in teaching for global learning also varied according to their contexts. Catherine had a deep commitment to activism in her personal life and this showed as she guided her students to travel, create personal bonds of friendship, and engage in global citizenship activities. Hannah, too, was motivated by the creation of personal bonds, which she expressed led to activism. Once her students had created meaningful relationships with others, their work to help the community they were a part of, both local and global, was an inevitable consequence. For Katya, an English teacher in Belarus, the goal of global education was more straightforward. She wanted her students to improve their language skills while learning more about other cultures and finding new ways to communicate and acquire knowledge using technology.

Khalisah and Tara also emphasized the use of ICT in global learning. For both of these technology teachers, the goal was to infuse their technology curricula with global education and opportunities to learn about others. All of the participants expressed the importance of ICT use in global learning, and the interconnectedness of ICT with global learning. Many expressed that the need for global education was a direct consequence of schools' abilities to connect directly with one another through ICT. Whereas only a few

decades ago schools were relatively isolated in teaching their students, schools of the 21st Century must prepare students to successfully and critically negotiate the information available in a newly interconnected world. Students come to school with a facility in using technology, and teachers must prepare students to use these resources critically and responsibly. Carano and Berson (2007) pointed to the expansion of the traditional classroom walls by technology as an opportunity to remedy a lack of cultural awareness among students while providing an interactive experience.

Teachers' lack of formal preparation highlights the importance of Hicks' (2003b, 2007b) Process Dimension. When teachers lacked formal knowledge of the subject area they were teaching, the need for participatory pedagogy became imperative. In this case, teachers' lack of formal preparation led them to engage in a holistic and participatory approach to teaching and learning. In Hicks' Process Dimension, "The medium of learning should match the message" (2003a, p. 13). Teachers learned content as they taught for global learning, thus modeling the importance of global education and the process by which students can develop global mindedness.

In their efforts to widen student perspectives and engage students globally, and to motivate colleagues and pupils, teachers were involved in all four dimensions of Hicks' (2003b, 2007b) framework. They utilized the Issues Dimension as they examined global issues and the interconnectedness between issues, the Spatial Dimension as they connected the students' local experiences with global ones, the Temporal Dimension as they explored ways in which students could learn from past events to plan solutions for the future, and the Process Dimension as they emphasized experiential pedagogy, particularly in the use of ICT to make their students part of a larger, global community.

Table 3 summarizes the relationships between the findings of this study, the theoretical framework, and key research literature.

Table 3: Results for Research Question 2 – How Do These K-12 Educators Teach for Global Learning?

Result	Relationship to Hicks’ framework for global education	Other Key Research Literature
<p><i>Preparation for teaching for global learning –</i> Participants had no formal preparation to teach for global learning and were not social studies educators</p>	<p><i>Process Dimension –</i> Focus on personal and social skills needed to work cooperatively with others (Hicks, 2007b, p. 25). Lack of formal preparation led participants to engage in a holistic and participatory approach to teaching and learning (Hicks, 2007b, p. 25).</p>	<p><i>Carano (2010) –</i> Global mindedness can be developed through family, exposure to diversity, minority status, curious disposition, global education courses, having a mentor, and professional service. <i>Merryfield (2000) –</i> Educators described significant experiences as a minority in their own communities or in an immersion experience in</p>

<p><i>Objectives in teaching for global learning</i></p> <ul style="list-style-type: none"> • Widening student perspectives and global engagement • Motivating teachers and students 	<p><i>Issues Dimension</i> – Focus on the exploration of the problem areas of wealth and poverty, human rights, peace and conflict, and the environment, and the solutions to these problems (Hicks, 2007b, p. 24)</p> <p><i>Spatial Dimension</i> – Focus on the interdependence between issues, people, places and countries (Hicks, 2007b, p. 24-25)</p> <p><i>Temporal Dimension</i> – Focus on connections between the past, present, and future, and the need to think more creatively and critically about the impact of local-global issues (Hicks, 2007b, p. 25)</p>	<p>the development of their global perspectives.</p> <p><i>Pigozzi (2006)</i> – In this era of globalization, the world’s peoples can only thrive if they accept their common destiny and learn to live as global citizens.</p> <p><i>Serf (2010)</i> – Young people should know about the centrality of human relationships and common human experiences</p> <p><i>Shah and Young (2009)</i> – Students who had experienced global education were more likely to agree that what they do in their daily lives impacts people in other countries, and that they can make a difference.</p>
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<p><i>The interconnectedness of global education and global learning with ICT – technology was viewed as integral to the teaching of global education</i></p>	<p><i>Process Dimension – Focus on personal and social skills needed to work cooperatively with others (Hicks, 2007b, p. 25)</i></p> <p><i>Process Dimension – Focus on personal and social skills needed to work cooperatively with others (Hicks, 2007b, p. 25)</i></p>	<p><i>Carano and Berson (2007) – The expansion of traditional classroom walls by technology is an opportunity to remedy a lack of cultural awareness using an interactive experience.</i></p> <p><i>Merryfield (2007) – The use of diverse voices provided by ICT use helped students challenge stereotypes and misinformation. Students focused on commonalities rather than differences.</i></p> <p><i>Zong (2009) – Technology use facilitated a deeper</i></p>
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		level of global awareness among pre-service teachers.
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The final question explored the ways in which the participants made decisions about pedagogy and curricula when teaching for global learning. Specifically, I examined how global education was integrated into established curricula, and which factors facilitated or hindered teaching. Because of the immediate access to an audience that is provided by ICT use, both students and teachers were motivated to achieve at a higher level. Participants expressed that their work and their students' work were prepared with an audience in mind, and added that they did not want to fall short in comparison to others. Several participants from the US stated that colleagues in their schools had reacted with shock and surprise when they discovered that their students' work was not superior to that of students in other countries. Gragert (2001) described some of the benefits to international collaboration as a means of teaching for global learning:

Through international collaboration problems get solved. But the individual student benefits as well. We see heightened motivation in class. We see improved reading and writing skills. We see excited students taking one aspect of a project and expanding it to another that they created on their own. (p. 5)

While all of the participants expressed that they had the support of their schools' administrations, they also all expressed a lack of support among colleagues. Though fellow teachers were generally willing to facilitate projects when asked to do so by giving up class time or doing some of the instruction, they were not willing to initiate projects

within their own settings. Participants attributed this to insufficient time, especially regarding the need to complete required curricula and standards, limits on technology use in the schools, and lack of teacher expertise and confidence. However, several participants expressed that they were currently working within their schools to train colleagues in how to implement telecollaborative global learning projects within the schools, and were optimistic that they would see a change in teachers' attitudes and willingness to participate in the near future. These participants demonstrated leadership within their settings and a commitment to implementing global learning in their schools.

Because the final research question explores teachers' decision making in designing and implementing curricula and pedagogy, and the factors that facilitate or hinder teaching for global learning, it is closely aligned to Hicks' (2003b, 2007b) Process Dimension. The Process Dimension discusses the type of teaching and learning that is most appropriate for teaching for global learning. As teachers find ways to implement global education into their existing curricula, they focus on exploring different values perspectives in a holistic and participatory approach (Hicks, 2007b, p. 25). They must find ways to work cooperatively and effectively with the administrators and other teachers in their buildings. They develop a wide range of skills and become critical thinkers (Hicks, 2003a, p. 13). In making these decisions in how to integrate global education into the curricula, teachers must explore the links between curricula and issues (Issues Dimension) and see patterns and connections as they examine connections from local to global levels (Spatial Dimension) (Hicks, 2007b, p. 21).

Tye and Tye (1993) discussed the importance of teacher enthusiasm and confidence among teachers as critical to success in teaching for global education:

Teachers who feel that the problems of their school are overwhelming are unlikely to invest much time trying to solve them... If a significant proportion feel competent, confident, and self-sufficient, this too will create a characteristic environment; one that is adaptive and resilient. This is the kind of environment in which global education has a real chance of success. (p. 62)

Through dedication and a commitment to educating colleagues, the participants in this study have a real chance to effect change within their buildings. Tye and Tye (1993) concluded that with sensitivity to the issues that hinder teaching for global learning, "...global education can be successfully integrated and teacher resistance to change can be overcome" (p. 63). Table 4 highlights the relationships between the findings of this study, the theoretical framework, and key research literature.

Table 4: Results for Research Question 3 – How Do These K-12 Educators Make Decisions About Pedagogy and Curricula When Teaching for Global Learning?

Result	Relationship to Hicks’ framework for global education	Other Key Research Literature
<i>Integrating global education into the curriculum</i> – global education was not part of the curricula, but was integrated in order to teach certain	<i>Issues Dimension</i> – Focus on the exploration of the problem areas of wealth and poverty, human rights, peace and conflict, and the	<i>Cross and Molnar (1994)</i> – Global education lacks a precise curricular meaning. <i>Mundy and Manion (2008)</i> – A high degree of

<p>standards and skills</p>	<p>environment, and the solutions to these problems (Hicks, 2007b, p. 24)</p> <p><i>Spatial Dimension</i> – Focus on the interdependence between issues, people, places and countries (Hicks, 2007b, p. 24-25)</p> <p><i>Process Dimension</i> – Focus on personal and social skills needed to work cooperatively with others (Hicks, 2007b, p. 25)</p>	<p>variation exists in Canadian provinces regarding global education curricula and instructional guidance.</p> <p><i>Rapoport (2009)</i> - Little is known about how teachers who do encourage global learning make decisions and implement their programs, and teachers lack straightforward curricular guidance in teaching for global learning.</p>
<p><i>Facilitators for teaching for global learning</i> –</p> <ul style="list-style-type: none"> • Administrative support • Student enthusiasm • Safety and reliability of educationally designed websites 	<p><i>Process Dimension</i> – Focus on personal and social skills needed to work cooperatively with others (Hicks, 2007b, p. 25)</p>	<p><i>Gragert (2001)</i> – Global learning is motivational for students and leads to improved reading and writing skills.</p> <p><i>Merryfield (2007)</i> – While teachers used and valued global websites, they</p>

<p><i>Barriers to teaching for global learning –</i></p> <ul style="list-style-type: none"> • Insufficient time • Limits on technology use in schools • Lack of teacher expertise and confidence 	<p><i>Process Dimension – Focus on personal and social skills needed to work cooperatively with others (Hicks, 2007b, p. 25)</i></p>	<p>eventually relied on large American websites for knowledge about the world.</p> <p><i>Tye and Tye (1993) – Teachers who feel overwhelmed are unlikely to be successful in global learning projects. Those who resist global education do not understand the field, do not value it, or do not feel they have time to engage in it.</i></p>
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Significance and Implications

It is critical to note that, in the present study, none of the participants were social studies or history educators, and none had formal training in the teaching of global education. Instead, the participants represented the fields of library science, technology, and foreign languages. None had a curriculum which in any way prescribed teaching global education, although one had worked within her building to change the school’s focus to one of global learning, and had been an integral part of rewriting the school’s vision and mission statements to reflect teaching for global understanding. Though few

empirical studies examine teacher practice in teaching for global education, the majority of those that do focus on social studies teachers (Gaudelli, 2003; Merryfield, 1998).

In addition, the present study makes a significant contribution to existing global education literature because the participants represent all grade levels, K-12, and several regions of the US and the international community. Very few studies have been conducted in American classrooms following the philosophical and political changes that resulted after the September 11 terrorist attacks. Additionally, few studies have examined the impact implementation of No Child Left Behind has had on global learning American classrooms, particularly American elementary classrooms which have suffered from a narrowing of the curriculum and an emphasis on “the basics” of literacy and mathematics, to the exclusion of social studies, science, and the arts (Gaudelli, 2003). This study demonstrates that teachers are engaging in global learning despite a lack of training and a formal curriculum. It is critical that researchers, policy makers, and educators support these teachers’ initiatives by facilitating their work, and by discovering how we can implement similar programs in schools around the world.

The participants in this study were motivated to teach for global learning because of a deep, personal commitment to doing so. In several cases, this commitment had its origins in experiences they had had prior to teaching with travel or cultural exchanges. Others, however, became convinced that global education was critical to student learning because of conversations they had had with fellow teachers, or their own exploration of the world using ICT. In addition to these personal commitments, however, all of the teachers were motivated to continue their work due to the bonds they had formed with other teachers internationally. They expressed that they had formed deep personal

relationships with these fellow teachers, even to the point of inviting them into their homes and becoming involved with their personal lives. The creation of personal bonds and the experiences of traveling and meeting others is a powerful motivator for a sustained commitment to global education.

Because global education was not a standard or curricular goal for the participants, they instead used it as the content through which to deliver their own standards. Hannah, for example, taught the library skill of research as the students researched the information they needed to complete learning circle projects. Tara used her students' global projects as the means to have them demonstrate mastery of technology programs and skills. Rather than teaching a global education curriculum, the participants taught their subject areas and standards with an emphasis on global awareness and global learning. Global learning provided the framework through which curricular content was delivered.

Implications for Educational Policy Makers

Serf (2010) provided a definition of global learning which viewed it as a framework for the delivery of other curricula. He stated that, "...[global education] may be defined as about meeting the educational needs of those growing up in an increasingly globalised society; ...helping them to have a deeper understanding of their interdependence; and providing opportunities to participate fully in their education" (p. 242). Shah and Young (2009) propose that through several policy interventions, we can ensure that global education is not simply a desired extra in the curriculum but a part of mainstream education. These changes include a coherent vision that puts education for a just and sustainable world at the heart of schools' visions, a curriculum which places all

learning in a global context, valuing critical and reflective dispositions in educators who can then teach students to think critically and reflectively, challenging prejudices and directly addressing complex, global issues, and fostering innovation through partnership with NGOs and government agencies. In order to prepare students for the global world of the 21st Century, educational policy makers, local school boards, and schools need to refocus their visions to reflect a commitment to global education and learning.

Implications for Teacher Practice

Teachers, too, need to refocus their classroom practice to include critical thinking, reflection, and a commitment to teaching skills and attitudes in a global context. Mundy and Manion (2008) identified six common global education dispositions as described in global education literature:

1. A view of the world as one system, and of human life as shaped by a history of global interdependence.
2. Commitment to the idea that there are basic human rights and that these include social and economic equality as well as basic freedoms.
3. Commitment to the notion of the value of cultural diversity and the importance of intercultural understanding and tolerance for differences of opinion.
4. A belief in the efficacy of individual action.
5. A commitment to child-centered or progressive pedagogy.
6. Awareness and a commitment to planetary sustainability. (p.944)

Clearly, teaching for global learning is not limited to educators who are experts in history, government, or social studies. Instead, educators and policy makers need to refocus their curricula and pedagogy to embrace an inclusive vision of teaching that leads to the development of global mindedness in students and creates powerful global learning experiences.

Implications for Teacher Preparation Programs

Finally, participants in the study vocalized their deep personal commitment to global education. Researchers (Carano, 2010; Merryfield, 2000) have explored how these attitudes and other significant factors contribute to educators' commitment to global learning. Frequently, globally minded educators point to significant experiences either as a minority within a majority culture, international travel, and the development of personal connections as factors which contributed to their developing a global perspective. If pre-service teachers have not had these types of significant experiences, what can be done to develop their global mindedness? Research by Horsley and Bauer in Australia (2010) indicated that when new teachers attempted to incorporate global education into their teaching, they relied heavily on undergraduate knowledge and disciplines to make meaning of new information and transform it into knowledge and skills. Their understanding of global education was based on their prior knowledge, and this influenced their teaching for global learning.

Studies by Carano (2010) and Zong (2009) demonstrated that opportunities presented to pre-service teachers through online discussion, exposure to diversity, and global education coursework can also contribute to the development and/or intensification of global perspectives, as well as encourage a critical understanding of

global issues and events. It is therefore critical that teacher preparation programs expose pre-service teachers to diversity in schools and communities, encourage international experiences, ensure access to high quality global education curricula, encourage the development of critical and reflective thinking, and teach the use of ICT as a means of bringing a global perspective to all curricula and forming deep relationships.

Limitations

This study was intended to be a first step in exploring how teachers who engage in telecollaborative global learning projects conceptualize global learning, how they teach for it, and how they make decisions for curricula and pedagogy when engaging in teaching for global learning. Because of the nature of the study being limited to six participants, all of whom are engaged in learning circles projects through iEARN, there are certain limitations to the study.

First, the participants may not represent the whole of teachers who engage in telecollaborative global learning projects. They were selected from a group of teachers who were actively involved in learning circles and who responded to an email requesting study participants. There are certainly many more educators engaged in global learning projects whose participation was not solicited, and indeed, many more learning circle members who chose not to respond to the request. In fact, all of the six selected through purposeful sampling were quite active members of their circles, and usually responded to all of my requests within a day or two. This indicates a high level of motivation and interest in learning circles and the study, and may not be representative of educators who engage in global learning practices as a whole.

Secondly, all of my data collection was conducted electronically and was primarily limited to self-reported data. Because of the limitations of time and space, and the fact that the participants were all located in other states and countries, I was unable to observe their teaching in the field. In addition, the only face-to-face communication we had was a Skype interview. In all other communications participants had the opportunity to reflect upon and craft their responses to questions. As a result, they may have attempted to anticipate the expected response, or tailored theirs to make it seem more positive. They may even have fabricated some responses. However, because I triangulated data through the use of four electronic interview guides, a Skype interview, and document analysis, I do not believe this to be the case. Additionally, two participants were not able to engage in Skype interviews due to technology limitations. One of these responded to some of the interview questions in writing.

Finally, the study was limited by language and culture. Three of the participants were not native speakers of English. As such, they may not have been able to fully and clearly express their thoughts and opinions in English. They may also have felt bounded by certain cultural assumptions, either because they were attempting to satisfy me and my cultural background, or because they simply assumed I could not fully understand and appreciate their perspective. They may not have wanted to reveal what they considered to be negative aspects of their school, educational systems, or cultures. However, I am a trained language educator with a MEd in Second Language Education, Georgia K-12 certification in both ESOL and French, and 21 years of classroom teaching experience. In addition, I have lived in two different countries for a total of six years, where I learned from and taught with people from other language backgrounds and cultures. I feel that

these qualifications equipped me to face limitations in language and culture, and uniquely prepared me to tailor my own speech and questioning to make it free of jargon, slang, and other misunderstandings.

Recommendations for Future Research

The current study provided a glimpse into the conceptualizations and practices of global educators, but further empirical research is needed to provide a deeper understanding. First, similar studies should be conducted on a larger scale to determine if the findings represent global educators as whole. Larger scale studies should be conducted including participants who engage in other telecollaborative global learning practices, as well. In addition, each of the three research questions should be further broken down and analyzed to provide more in-depth data and results, and therefore more thorough understanding.

Secondly, more studies are needed to understand the development of global attitudes in teachers. Though a few studies exist (Carano, 2010), they are in large part preliminary studies with a limited number of participants. These studies need to be expanded to include teachers on a larger scale. In addition, teacher preparation programs, exchange programs, and online collaboration programs should be studied in depth to determine their influence on the development of global perspectives among preservice and inservice teachers.

Because the data in this study was largely self-reported, similar studies should be conducted in which the researcher follows the self-reported data with observation in the field. The question of how global mindedness on the part of teachers translates into classroom practice needs to be more closely examined.

Finally, few studies have focused on the impact that globally minded teachers and telecollaborative global learning projects have on students. Though the participants in this study expressed the idea that these projects improved their students' literacy skills and motivation, and there are several examples in the literature that express this, empirical research that demonstrates this connection is non-existent. In addition, the literature is lacking in research that demonstrates that teachers who teach for global understanding have a measureable impact of student attitudes and perspectives. Qualitative and quantitative studies that demonstrate the impact of globally minded teaching and the use of telecollaborative global learning projects are needed to broaden the knowledge base of global education and learning.

Conclusion

The flattening of the world through new technologies and globalization challenges all of us. ...By introducing students to diverse people within a country, a teacher can help students learn to appreciate complexity within cultures and the dynamics of how cultures change. As they work with [online] materials, students also develop skills in perspective consciousness and an anticipation of complexity. (Merryfield, 2007, p. 270)

The teacher participants in this study were a group of dedicated individuals who believed in the value of global education as a means of developing interpersonal and intercultural understanding. They were in fact so committed to incorporating global learning into their classrooms that they found ways to do so even when these projects

were not a part of their curricula. They did this without any formal training in global education.

Bickley and Carleton (2009) discussed the importance of global collaborative learning, saying that, “it is about connecting students in communities of learners around the world so that they can work together on projects that make a difference globally and locally. It is about building relationships and achieving authentic, meaningful learning” (p. 20). Teachers who choose to engage in telecollaborative global learning projects prepare their students for the interconnected world of the 21st Century because they teach their students *with* the world rather than just *about* the world. This cooperation and collaboration engages the learner while developing confidence, self-esteem, and the skills of critical thinking, communication, and conflict resolution (Oxfam, 2006). The future of our planet depends on the ability of our children to make decisions in peaceful cooperation with others, with respect for all people and an understanding of global sustainability and human rights. Telecollaborative global learning projects are a powerful tool to prepare the next generation in the creation of a better world for all.

References

- Abbott, L., Austin, R., Mulkeen, A., & Metcalfe, N. (2004). The global classroom: Advancing cultural awareness in special schools through collaborative work using ICT. *European Journal of Special Needs Education, 19*(2), 225-240.
- American Council on Education. (2011). Contents. *Global learning for all*. Retrieved November 5, 2011 from <http://www.acenet.edu/AM/Template.cfm?Section=Home&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=40497>
- Anderson, L. F. (1968). An examination of the structures and objectives of international education. *Social Education, 35*(7), 639-652.
- Audacity. (2011). Audacity: the free, cross-platform sound editor. Retrieved February 4, 2011, from <http://audacity.sourceforge.net>
- Banks, J. A. (2004). Teaching for social justice, diversity, and citizenship in a global world. *The Educational Forum, 68*(4), 296-305.
- Bickley, M., & Carleton, J. (2009). Students without borders: Global collaborative learning connects school to the real world. *Learning and Leading with Technology, November 2009*. Retrieved September 5, 2011 from http://www.iste.org/Libraries/Leading_and_Learning_Docs/November_2009_Students_Without_Borders_Global_Collaborative_Learning_Connects_School_to_the_Real_World.sflb.ashx
- Bogdan, R. C., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theories and methods, 5th edition*. Boston, MA: Pearson Education, Inc.
- Boyle Swiniarski, L. (2006). Helping young children become citizens of the world.

Scholastic Early Childhood Today, 21(3), 36-42.

- Carano, K. T. (2010). Through the Lens of a Global Educator: Examining Personal Perceptions Regarding the Construction of World-Mindedness. *Dissertation Abstracts International*, 72(02). (UMI No. 3432704)
- Carano, K. T., & Berson, M. J. (2007). Breaking stereotypes: Constructing geographic literacy and cultural awareness through technology. *The Social Studies*, 98(2), 65-70.
- Carlsson-Paige, N., & Lantieri, L. (2005). A changing vision of education. In N. Noddings (Ed.) *Educating citizens for global awareness* (pp. 107-121). New York: Teachers College Press.
- Cross, B. E., & Molnar, A. (1994). Global issues in curriculum development. *Peabody Journal of Education*, 69(4), 131-140.
- Cummins, J., & Sayers, D. *Brave new schools: Challenging cultural illiteracy*. New York: St. Martin's Press.
- Davies, L. (2006). Global citizenship: Abstraction or framework for action? *Educational Review*, 58(1), 5-25.
- Ferriter, W. M. (2010). How flat is your classroom? *Educational Leadership*, 67(7), 86-87.
- Friedman, T. (2007). *The world is flat: A brief history of the twenty-first century*. New York: Picador.
- Gardner, H. (2008). *5 minds for the future*. Boston: Harvard University Press.
- Gragert, E. (2001). It takes many villages to make a world: iEARN. *Issues in Global Education*, 166, 2-10.

- Gaudelli, W. (2003). *World class: Teaching and learning in global times*. Mahwah, NJ: Laurence Erlbaum Associates, Inc.
- Gaudelli, W., & Heilman, E. (2009). Reconceptualizing geography as democratic global citizenship education. *Teachers College Record*, 111(11), 2647-2677.
- Gibson, K. L., Rimmington, G. M., & Landwehr-Brown, M. (2008). Developing global awareness and responsible world citizenship with global learning. *Roeper Review*, 30(1), 11-23.
- Glimps, B. J., & Ford, T. (2008). Using internet technology tools to teach about global diversity. *The Clearing House* 82(2), 91-95.
- Grbich, C. (2007). *Qualitative data analysis: An introduction*. London: Sage Publications.
- Hanvey, R. G. (1976). *An attainable global perspective*. New York: Center for Global Perspectives in Education.
- Hicks, D. (2003a). *Lessons for the future: the missing dimension in education*. New York: Routledge/Falmer. Retrieved November 12, 2011 from <http://proxygsu-ken1.galileo.usg.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=92430&site=ehost-live&scope=site>
- Hicks, D. (2003b). Thirty years of global education: A reminder of key principles and precedents. *Educational Review*, 55(3), 265-275.
- Hicks, D. (2007a). Principles and precedents. In D. Hicks & C. Holden (Eds.), *Teaching the global dimension* (pp. 14-30). New York: Routledge.
- Hicks, D. (2007b). Responding to the world. In D. Hicks & C. Holden (Eds.), *Teaching the global dimension* (pp. 3-13). New York, NY: Routledge.

- Horsley, M. W., & Bauer, K. A. (2010). Preparing early childhood educators for global education: The implications of prior learning. *European Journal of Teacher Education, 33*(4), 421-436.
- iEARN. (2011a). Learning circles. *iEARN collaboration centre*. Retrieved September 20, 2011 from <https://media.iearn.org/projects/learningcircles>.
- iEARN. (2011b). *Learning with the world, not just about it*. Retrieved September 20, 2011 from www.iearn.org.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Thousand Oaks, CA: Sage.
- McIntosh, P. (2005). Gender perspectives on educating for global citizenship. In N. Noddings (Ed.) *Educating citizens for global awareness* (pp. 22-39). New York: Teachers College Press.
- McPherson, S., Wang, S. K., Hsu, H. Y., & Tsuei, M. (2007). New literacies in teacher education. *TechTrends 51*(5), 24-31.
- Mehlinger, H. D., Hutson, H., Smith, V., & Wright, B. (1980). *Global studies for American schools*. Washington: National Education Association.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Merryfield, M. M. (1998). Pedagogy for global perspectives in education: Studies of teachers' thinking and practice. *Theory and Research in Social Education, 26*(3), 342-379.
- Merryfield, M. M. (2000). Why aren't teachers being prepared to teach for diversity,

- equity, and global interconnectedness? A study of lived experiences in the making of multicultural and global educators. *Teaching and Teacher Education*, 16(4), 429-443.
- Merryfield, M. M. (2002). The difference a global educator can make. *Educational Leadership*, 60(2), 18-21.
- Merryfield, M. M. (2004). Elementary students in substantive culture learning. *Social Education*, 68(4), 270-273.
- Merryfield, M. M., & Kasai, M. (2004). How are teachers responding to globalization? *Social Education*, 68(5), 354-359.
- Merryfield, M. M. (2007). The web and teachers' decision-making in global education. *Theory and Research in Social Education*, 35(2), 256-276.
- Muhr, T. (2008). *Atlas.ti*. Berlin: Atlas.ti Scientific Software Development GmbH.
- Mundy, K., & Manion, C. (2008). Global education in Canadian elementary schools: An exploratory study. *Canadian Journal of Education*, 31(4), 941-974.
- Myers, J. P. (2010). "To benefit the world by whatever means possible": Adolescents' constructed meanings for global citizenship. *British Educational Research Journal*, 36(3), 483-502.
- Noddings, N. (Ed.). (2005). *Educating citizens for global awareness*. New York: Teachers College Press.
- Oxfam. (2006). *Education for global citizenship: A guide for schools*. Great Britain: Oxfam.
- Partnership for 21st Century Skills. (2004). Framework for 21st century learning.

Retrieved September 4, 2011 from

http://www.p21.org/index.php?option=com_content&task=view&id=254&Itemid=120

Pigozzi, M. J. (2006). A UNESCO view of global citizenship education. *Educational Review*, 58(1), 1-4.

Pike, G., & Selby, D. (1988). *Global teacher, global learner*. London: Hodder and Stoughton.

Rapoport, A. (2009). A forgotten concept: Global citizenship education and state social studies standards. *The Journal of Social Studies Research*, 33(1), 91-112.

Richardson, R. (1979). *Learning for change in world society*. London: World Studies Project.

Serf, J. (2010). Bringing them together: What children think about the world in which they live and how it could be improved. *Forum*, 52(2), 241- 253.

Shah, H., & Young, H. (2009). Global learning in schools, and the implications for policy. *Education Review*, 21(2), 15-22.

Skelton, M. (2010). Global learning. *Education Journal*, 124, 39.

Smith, S. N., & Fairman, D. (2005). The integration of conflict resolution into the high school curriculum: The example of workable peace. In N. Noddings (Ed.) *Educating citizens for global awareness* (pp. 40-56). New York: Teachers College Press.

Stewart, V. (2008). World-Smart Students. *Phi Delta Kappan*, 90(3), 203-205.

Thaman, K. H. (2010). Teacher capacities for working towards peace and sustainable development. *International Journal of Sustainability in Higher Education*, 11(4),

353-364.

Tye, B. B., & Tye, K. A. (1992). *Global education: A study of school change*. Albany: State University of New York Press.

Tye, K. A., & Tye, B. B. (1993). The realities of schooling: Overcoming teacher resistance to global education. *Theory into Practice*, 32(1), 58-63.

Tye, K. A. (Ed.). (1991). *Global education: From thought to action*. Alexandria, VA: Association for Supervision and Curriculum Development.

Tye, K. A. (1999). Global education: A worldwide movement. A preview of a study of global education practices in 52 countries [Electronic version]. *Issues in Global Education* (150). Retrieved February 4, 2011, from <http://www.globaled.org/issues/150/index.html>

Tye, K. A. (2003). Global education as a worldwide movement. *The Phi Delta Kappan*, 85(2), 165-168.

Wright, A. E. (1994). Implementation of global education in the classroom: A comparison of Swedish and American educators. In J. L. Easterly (Ed.) *Promoting global teacher education: 7 reports* (pp. 53-62). Reston, VA: Association of Teacher Educators.

Yin, R. K. (2003). *Case study research: Design and methods*. Thousand Oaks, CA: Sage.

Zong, G. (2009). Developing preservice teachers' global understanding through computer-mediated communication technology. *Teaching and Teacher Education*, 25(5), 617-625.

Zong, G., Wilson, A. H., & Yao Quashiga, A. (2008). Global education. In L.S. Levstik & C. A. Tyson (Eds.) *Handbook of research in social studies education* (pp. 197 –

Appendix A

Data Collection Planning Matrix

Research question – What do I need to know?	Why do I need to know this?	From what data sources will answers be elicited?
<p>1. How do K-12 educators who engage in telecollaborative learning projects conceptualize global education?</p>	<ul style="list-style-type: none"> • Global education is defined by its practitioners, and cultural differences lead to differences in conceptualization of global education (Anderson, 1968). • The conceptual literature on global education needs to be strengthened by the addition of teacher voices (Merryfield, 1998). • Scholars need to understand how teachers and students conceptualize global education (Gaudelli, 2003). • There is considerable overlap between theory and practice, and teachers organize their frameworks around their students, placing them at the center and connecting global content and pedagogy to students' needs and 	<ul style="list-style-type: none"> • Electronic interview guides • Semi-structured interviews conducted using Skype • Electronic message exchanges • iEARN message board postings • Document analysis of relevant school literature

	interests (Merryfield, 1998).	
2. How do these K-12 educators teach for global learning?	<ul style="list-style-type: none"> • A resurgence in the literature calls for global education to prepare students for an increasing interconnectedness among people and nations (e.g. Adams, 2008; Davies, 2006; Merryfield, 2004; Stewart, 2009). • Researchers point out the critical lack of empirical evidence demonstrating that global learning is taking place in schools, or describing ways in which teachers can teach for global understanding (Gaudelli, 2003; Merryfield, 2000; Zong, Wilson, & Quashiga, 2008). • Most existing studies predate the world changing events of September 11, 2001 (Gaudelli & Heilman, 2009) • Few studies have been conducted in the elementary setting (Gaudelli, 2003). 	<ul style="list-style-type: none"> • Electronic interview guides • Semi-structured interviews conducted using Skype • Electronic message exchanges • iEARN message board postings • Document analysis of relevant school literature
3. How do these K-12 educators make	<ul style="list-style-type: none"> • Little is known about how teachers 	<ul style="list-style-type: none"> • Electronic interview guides

<p>decisions about pedagogy and curricula when teaching for global learning?</p>	<p>make decisions and implement programs (Rapoport, 2009).</p> <ul style="list-style-type: none"> • Teachers lack straightforward curricular guidance (Mundy & Manion, 2008; Rapoport, 2009). 	<ul style="list-style-type: none"> • Semi-structured interviews conducted using Skype • Electronic message exchanges • iEARN message board postings • Document analysis of relevant school literature
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Appendix B

Institutional Review Board Approval

4/11/2011

Holly Oran, Student

Department of Inclusive Education

1000 Chastain Road, #0124

Kennesaw, GA 30144-5591

RE: Your application dated 4/6/2011, Study #11-306: Teaching for Global Understanding through Telecollaboration: A Case Study of K-12 Educators' Beliefs and Practices about Global Education

Dear Ms. Oran:

I have reviewed your application for the new study listed above. This study qualifies as exempt from continuing review under DHHS (OHRP) Title 45 CFR Part 46.101(b)(2) - educational tests, surveys, interviews, public observations. You are free to conduct your study as approved without further reporting to the IRB.

NOTE: Should you choose to revise the study, please notify the IRB prior to implementation of any changes. The board must review all revisions to ensure that the study continues to fall within an exempted category of research.

Thank you for keeping the board informed of your activities. Contact the IRB at irb@kennesaw.edu or at (678) 797-2268 if you have any questions or require further information.

Sincerely,

Christine Ziegler, Ph.D.

Institutional Review Board Chair

Appendix C

Consent Form

I, _____ (name) agree/give my consent to participate in the research project entitled “Teaching for Global Learning through Telecollaboration: A Case Study of K-12 Educators’ Beliefs and Practices about Global Education”, which is being conducted by Holly Oran, Kennesaw State University, 815 Commons Ct., Woodstock, GA, USA, 678-457-2985. I understand that this participation is voluntary; I can withdraw consent at any time without penalty.

The following points have been explained to me:

1. The purpose of this study is to examine how telecollaborative learning projects are used by K-12 teachers in the United States and abroad to develop global understanding among schoolchildren and promote social justice and global citizenship. The benefits that I may expect from it are: Participating in this study will lead participants to reflect upon their own personal understandings of global education, global learning, and global citizenship. They will also reflect upon their classroom practices and decision making processes. Research indicates that reflective practice is beneficial to teacher effectiveness. In addition, this study is a first step in determining how schools, teachers, and districts can educate students for global understanding and prepare them to work cooperatively in the interconnected world of the 21st Century. It will provide information about how teachers conceptualize global education and how they engage in teaching for global learning.
2. The procedures are as follows: I will collect information from participants using written questionnaires, Skype interviews and instant messaging, blog and iEARN postings, and teacher submitted documents. Interviews will be audiotaped and will include open ended questions. Skype video interviews may be recorded using VodBurner, a Skype plug-in for recording video conferences.
3. The discomforts or stresses that may be faced during this research are: none anticipated
4. Participation entails the following risks: no known risks
5. The results of this participation will be confidential and will not be released in any individually identifiable form without the prior consent of the participant unless required by law. Interviews will be recorded and transcribed and then stored in a locked filing cabinet. Electronic data will be stored on a password protected personal computer and portable hard drive. Teacher names and school information will be kept confidential – every teacher and school will be assigned a number and/or alias and personal information will be kept separate from collected writings and interviews. Data will be destroyed five years after dissemination of findings.

6. Inclusion criteria for participation: Teacher members of iEARN who are actively engaged in telecollaborative learning projects through iEARN's learning circles. Participants must be at least 18 years old.

7. Expected duration of participation: 6 months

Holly Oran, April 11, 2011

Signature of Investigator, Date

Signature of Participant, Date

PLEASE SIGN BOTH COPIES, KEEP ONE AND RETURN THE OTHER TO THE INVESTIGATOR

Research at Kennesaw State University that involves human participants is carried out under the oversight of an Institutional Review Board. Questions or problems regarding these activities should be addressed to the Institutional Review Board, Kennesaw State University, 1000 Chastain Road, #0112, Kennesaw, GA 30144-5591, (678) 797-2268.

Appendix D

Introductory Electronic Interview Guide

Please tell me about yourself and your school. Please use the space at the bottom of the page if you need to explain any responses.

Name: _____

School : _____

E-Mail address: _____

Skype address: _____

Mailing address:

Your age: _____

Grade(s) you teach: _____

Subject (s) you teach:

How many years have you been teaching? _____

Is your school public (government funded), private (funded privately), parochial (religious) or something else (please describe): _____

What grade levels are served at your school? _____

How many years have you been an iEARN member? _____

Is your membership individual or institutional? _____

Who pays for your iEARN membership (yourself, the school, other)?

How many learning circles have you been involved in? _____

Which learning circle are you a member of now?

Please use this space to explain any responses:

Appendix E

Electronic Interview Guide 2

Thanks so much for agreeing to participate in my research! Please respond to the following questions and explain your answers.

1. Why did you become involved in learning circles?
2. How much time do you spend on learning circles?
3. How does learning circles fit in with your curriculum?
4. Do other teachers in your school do learning circles? If so, do you work together?
5. Have you used Skype or another program to videoconference with other schools and teachers? If not, why not? If yes, please describe the experience.
6. What kinds of learning activities do you do in connection with learning circles?
7. What is your goal in doing learning circles?
8. What does global education mean to you?
9. What does global learning mean to you?
10. Do you plan to do learning circles again? Why or why not?

Appendix F

Personal Experiences

I would like to know more about your personal experiences and training. Please answer the following questions as completely as you can. Again, my sincere thanks for participating!

1. Have you travelled to other countries? Please describe any travel experiences you have had. Where did you go, why, for how long, and what did you do?
2. What training have you had to teach global education? Describe any classes, seminars, or courses you have taken that you feel prepared you to teach for global education.
3. What significant experiences have you had with people from other countries and/or cultures, either now or during your childhood?
4. How did you first hear about iEARN, and what made you decide to become a member?

THANK YOU!!!!

Appendix G

Post Learning Circle Electronic Interview Guide

Thinking about your experience with this learning circle or others you have participated in, please answer the following questions.

1. What factors made it more difficult for you to participate in learning circles and/or teach for global perspectives?
2. What factors made it easier for you to participate in learning circles and/or teach for global perspectives?
3. What support did you find in your school for learning circles and/or global education?
4. How did you motivate your students to be interested in learning circles and/or global education?
5. If any, what resources other than iearn.org did you use to teach for global education?
6. Did you have any concerns about using learning circles?
7. Did you have any concerns about teaching for global education?
8. Has doing learning circles and/or teaching for global education made a difference in your teaching? How?
9. What did your students learn as a result of your participation in learning circles? Please include specific examples if possible and feel free to change students' names.
10. Do you have any additional comments about your experience that you would like to share?

Appendix H

Sample Interview Questions

1. What makes a person a global educator?
2. Why would you describe yourself as a global educator?
3. Why are you committed to global education?
4. How does someone become globally minded?
5. How can teachers develop global mindedness in their students?
6. Why don't other teachers in your school teach for global education?