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A Case Study of Two Universities in New York and Hong Kong

by

Maribel Roman

Submitted in partial fulfillment of the requirements for the degree

Doctorate of Philosophy

Department of Education Leadership, Management and Policy
Seton Hall University

2018

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SETON HALL UNIVERSITY COLLEGE OF EDUCATION AND HUMAN SERVICES OFFICE OF GRADUATE STUDIES

APPROVAL FOR SUCCESSFUL DEFENSE

Maribel Roman, has successfully defended and made the required modifications to the text of the doctoral dissertation for the Ph.D. during this Spring Semester 2018.

DISSERTATION COMMITTEE

(please sign and date beside your name)

Mentor:
Dr. Martin Finkelstein

Committee viennee:
Dr. Joseph Stetar

Committee Member:
Dr. Ming Fai Pang

April 18

The mentor and any other committee members who wish to review revisions will sign and date this document only when revisions have been completed. Please return this form to the Office of Graduate Studies, where it will be placed in the candidate's file and submit a copy with your final dissertation to be bound as page number two.

ABSTRACT

With the increasing integration of the world economy, nations are under growing pressure to compete internationally, resulting in a need to re-shape national education systems to train a multi-cultural workforce capable of competing globally. Consequently, the imperative to internationalize must focus on the preparation of teachers. This research study examined the internationalization of teacher education faculty through case studies of two universities: one in New York and one in Hong Kong. The main purpose is twofold: (1) to compare the extent to which, and the ways in which teacher education faculty in the two settings have internationalized the content of their courses and the pattern of their professional networks; and (2) to identify, based upon a theoretical framework developed by Blackburn and Lawrence (1995), the predictors of the extent and patterns of faculty internationalization. Internationalization has been conceived as study abroad, faculty joint or collaborative research across national borders, international internships, faculty and student exchanges and curricular development (Knight, 2004).

The study was shaped by two research questions: (1) How do teacher education faculties at the two case sites differ in terms of the extent and patterns of the internationalization as reflected in the content of their courses and the composition of their professional networks? and (2) What factors combine to explain both the extent and pattern of internationalization of course content and professional networks? To address these research questions, quantitative data was gathered through a survey of teacher education faculty at each of the two sites: Hong Kong and New York. The outcome variable of interest included three dimensions of internationalization: integration of international content, integration of international student networking opportunities, and faculty research and professional networks abroad. Three sets of predictor variables were

examined: demographics (nationality at birth and throughout schooling/profession), career characteristics (international mobility), and self-knowledge (perception of international research and engagement). To facilitate analysis, indexes of each of the three dimensions of internationalization were constructed based on survey items. Basic descriptive statistics, including measures of central tendency, of both the outcome and independent variables were generated to answer the first research question. Logistic regression analysis was used to test a predictive model of the determinants of each dimension of the outcome variable.

The results of this study showed that the faculty of Hong Kong University as compared to that of Queens College perceive themselves as being more internationally savvy, as they have more experience and engagement in the research, professional presentations, collaborations, and publishing in international settings. However, although HKU teacher education faculty are internationalized in their professional networks, they are no more likely than QC teacher education faculty to internationalize the content of their teacher education programs. Based on these results, we draw implications and recommend directions for future research.

Keywords: Internationalization, teacher education, teacher education faculty, international curriculum, higher education, New York, Hong Kong

ACKNOWLEDGEMENT

First and foremost, I would like to give praise and thanks to God, for His blessings throughout my research work and for giving me the strength, knowledge, and ability to persevere and complete my thesis satisfactorily. To Him be all the glory, for without His blessings, this achievement would not have been possible.

I would like to express my sincere gratitude to my advisor Dr. Martin Finkelstein for the continuous support of my Ph.D. study and related research, for his patience, motivation, and immense knowledge. His guidance helped me throughout my research and the writing of this thesis. I also want to thank the rest of my thesis committee, Dr. Joseph Stetar and Dr. Ming Fai Pang, for their insightful comments and encouragement.

I want to thank my friends and colleagues, Dr. James Daly and Dr. Gerald Ruscingno, for their insight, support, and mostly their friendship. I am also grateful to my friends Kory Mellon, Omayra Arocho, Vivienne Carr, Lucy Vazquez and in particular, I am grateful to my comay, Mayra Colon, for her love and support along the journey.

Lastly, but most importantly, I would like to thank my family, especially my eternal cheerleader, my mother, Valentina Mercado, who believed in me, supported me, and encouraged me. Mom, thank you for loving and supporting me unconditionally. Much gratitude to my late dad, Santiago Roman, who would tell me, "Maribel tu eres inteligente" any time I would doubt myself. Pops, I miss you so much, but I know you are always with me and share my accomplishment. I also want to thank my sisters, Belkis, Maria, Angela, Lourdes, and Carmen for their moral and emotional support. Last, but not the least, much gratitude to the love of my life, my son Andrew, who unknowingly inspires me to do things above my imagination.

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CHAPTER 1: INTRODUCTION

Statement of Problem and Significance

National boundaries in the United States are becoming more porous through immigration, technology, business, and cultural exchanges. According to the Centre for Migration Studies, the foreign-born population grew by 13.3 million or about 1.1 million per year from 1900 to 2014.

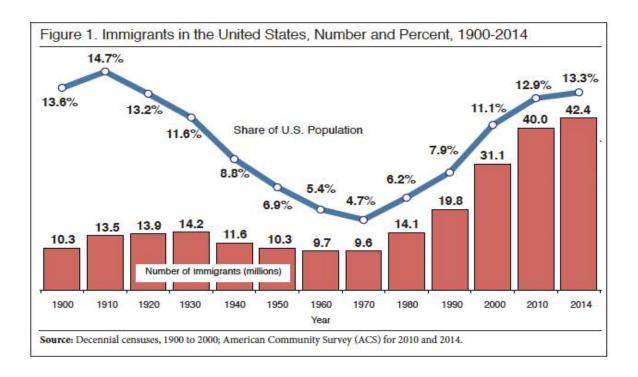


Figure 1.1. Number of immigrants living in the U.S. 1900-2014. (Source: Centre for Immigration Studies ©).

Immigrants now constitute 13.3% of the national population. However, the U.S. is not the only country with an increasing immigrant population. Russia's immigrant population is at 19% of their national population; Germany's is 20%; Canada's is at 28%, the Persian Gulf's is at 75%, and United Arab Emirates' is at 80% of their national population (UN World Population Policies, 2015). As national boundaries become more porous through immigration, technology, and business and cultural exchanges, more and more individuals will find themselves needing

new knowledge and skills to succeed in this changing environment. Cultural and international knowledge will be necessary for Americans to comprehend a world of competitiveness and diverse cultural differences.

Americans will need to recognize their own cultural uniqueness and develop a high level of cultural knowledge in dealing with more traditional cultures simply to succeed in promoting U.S. worldviews. The new global economy requires that individuals be multicultural in understanding and better informed about international issues, yet students in the United States are multi-culturally uninformed (Bell-Rose & Desai, 2005). According to the 2003 National Association of Foreign Student Advisers (NAFSA) Association of International Educators Report (NAFSA, 2003), for the completion of secondary education, the requirements often include only minimal course work in international studies, such as world history, geography, political science, and area studies, and some states require none at all. Because of this, many students only have the most basic knowledge of the geography and culture of world regions. The American Council on Education also concluded in their study that the K-12 education curriculum only contains minimal courses in international topics (ACE, 1999). A report by Carol M. Barker, former Senior Associate for Carnegie Corporation of New York and presently the Vice President of Program at the Nellie Mae Foundation, at a meeting convened by Carnegie Corporation of New York concluded that "American students' knowledge of the world remains limited and that baseline data, assessment and dissemination of new approaches and sustained commitment to implementation required for institutionalization in schools do not yet exist" (Barker, 2000). This is partly because K-12 education in the United States consists of models of citizenship focused primarily on the acquisition of knowledge of and values necessary for

participation in the American system (Kerr, 1999; Heyl & McCarthy, 2003; Bell-Rose & Desai, 2005).

With the changing economic, social, political and educational opportunities and conditions in nations around the world, it is imperative that schools respond. For Americans to sustain and build on their current successes, they need to understand their relationship with the rest of the world (Schneider, 2003). According to the Carnegie Corporation of New York report, *Education for International Understanding and Global Competence*,

Although the U.S. is now the world's preeminent military and economic power, and the reach of its political and popular culture is global, it cannot control events and remains vulnerable to faraway developments. Because of our global reach and the openness and diversity of our society, we are perhaps even more easily affected by international and global phenomena than small and remote nations. Nothing is therefore foreign to us even though we live and compete in a world of differences. Understanding our place in that world and the cultural, social, political and economic variations of which that world is comprised presents a tremendous challenge for education as we enter the twenty-first century. (Barker, 2000)

A very basic requirement is one that addresses both knowledge and skill. Students need to know about global trends and changes, with an ability to analyze the consequences of these trends and changes. Also, students need to be aware of the movement of people within and across borders and its effect on education, the threat of globalization perceived by traditional societies, and the economic instability and opportunities resulting from changes in resource exploration and delivery. Students need to examine the consequences of electronic

communication systems that evolve more quickly than many people seem able to absorb and embrace.

And yet, America's schools have historically focused on recommendations issued by the Committee of Ten, appointed at the meeting of the National Educational Association in 1892 (Hayes-Jacobs, 2010). The American school system is built on a model that was designed to meet the challenges of a society shifting from an agricultural economy to an industrial economy, yet it is the model we are using today to prepare young people for the 21st century. Teaching practices rooted in the transmission of knowledge through a top-down approach, relying on textbook readings, lectures and mechanical memorization do not mirror the dynamic and technologically rich world that young people today will enter. "Although we have had a century of fascinating innovation, experimentation, and exciting ideas since the committee issued its report, the artifacts speak. Simply by picking up a school catalogue or guide one can see clearly that the Committee of Ten reigns" (Hayes-Jacobs, 2010, p. 9). Society has simply outgrown the model of the 19th century.

The traditions of schooling, so tied to lecture and text, of limited critical thinking and marginal emphasis on examining the status quo or of generating knowledge, seem unlikely to be of continued value. New conceptions of education are needed to prepare our young people for this new world.

As schools prepare for a more globalized society, one of the many actions needed is to examine the preparation of teachers. Prospective teachers need the skills and bodies of knowledge to address the changes that come with a more global society. There is a content need. In order to effectively guide their own students, pre-service candidates need to know about the world. That means they need a sense of global history—an awareness of the major developments

over time and across continents. That history needs to include an understanding of the historic interplay between customs, cultures, and societies. The development of various political models, and their stability or lack thereof needs to be known. Prospective teachers must also have a sense of the essential role played by religion in the establishment of patterns of belief and behavior that so often bind people together, but which can divide them into fearful and hated combatants. Geography and the impact of location on development are also important to know. From resources to weather to suitability for transportation, prospective teachers must be knowledgable in this area (Kerr, 1999; Heyl & McCarthy, 2003; Bell-Rose and Desai, 2005).

The need for a more global consciousness is real in many venues but even more so in large cities with global financial centers that depend on economic growth and development and having a workforce that is cosmopolitan and capable of functioning on the world stage. In the United States, New York is considered a global city (GFCI 2010). Four of New York cities' five boroughs ranked among the nation's twenty most diverse countries. Queens ranks first with 48.5% foreign-born, Brooklyn third with 37.8%, Bronx 17th with 31.8%, and Manhattan seventh with 28.7% foreign-born. Staten Island did not rank within the top twenty but still has a significant foreign-born population at 20.9% (U.S. Census Bureau, 2007).

New York does not stand alone in requiring a particular international pedigree for its citizens. The same global knowledge will be necessary for people in other metropolises to comprehend an increasingly global world. This is true for Hong Kong. Like London and New York, Hong Kong can be considered a global city. According to the Global Financial Centers Index (GFCI, 2010), the Asian financial market is changing, with Hong Kong moving from fourth to third place behind London and New York, and it is now considered a real contender to become a global financial center. "Hong Kong remains a strong financial center and is in third

place in all industry sector sub-indices, except insurance, and in all areas of competitiveness" (GFCI, 2010). The index for measuring global cities was not size alone. Instead, it measured "how much sway a city has over what happens beyond its own borders – its influence on and integration with global markets, culture and innovation" (GFCI 2010). It is presumed that Hong Kong is the most likely Asian city to emerge as a global financial city assisted by a strong regulatory system and a well-skilled financial services workforce. Although China's domestic market for financial services is likely to grow rapidly and is attracting investment from firms around the world, Shanghai is still lagging Hong Kong as a truly global city, ranking in sixth place (GFCI, 2010). Hong Kong and Singapore are also in the top ten global cities. In joining London and New York as cities of global financial centers, Hong Kong will more likely require its citizens to be more internationally knowledgeable than most places. Hong Kong is undergoing a major education reform focused considerably on the need to develop global citizens.

This study will focus on two global cities, New York and Hong Kong, both with strong financial centers and a need to stay competitive in the global market. Although these two cities rank in the top four among global financial centers and global competitiveness (GFCI, 2010), they are very different in demographics. Unlike New York, Hong Kong is not a multicultural city. With a population of 94.9% Chinese, 2.1% Japanese, and a small percentage of other, the population of Hong Kong has two official written languages, Chinese and English (Government of Hong Kong, 2018). New York, however, is a pot of multiculturalism. With 64.4% born in New York, 11.7% born in a different state, and 21.6% foreign-born, the people of New York speak many languages, with 71.4% speaking English only, and 28.6% speaking a language other than English. New York's population is diverse in ethnicity with 67.8% white and the rest consisting of over twenty different ethnicities as well as many people who report two or more

ethnicities (U.S. Census Bureau, 2007). So how do demographics affect the globalization efforts and global competitiveness of these two cities? Is New York, a multicultural city, keeping pace with globalization? Where does Hong Kong stand in their efforts to develop global citizens?

Economic growth, development and improved living standards are considered to be directly linked to the state of education (Cobb, 1999). Hong Kong and New York will need to internationalize teacher preparation programs to prepare students better to be more culturally and internationally knowledgeable. Globalization not only brings many changes and challenges to our society generally, but specifically to the field of education. Educators today must not only become versed in world affairs, but they also need to help their students adopt a global perspective and build the skills required to interact effectively in our rapidly changing world (Schneider, 2003). This raises the question of how K-12 teachers, who have primarily been educated under a different paradigm, can be prepared for this challenge? Success will require a transformation in much of both what and how we teach and how we prepare teachers.

Institutions of higher education are the primary source of training teachers; therefore, it is their responsibility to provide graduates with the knowledge and experience necessary to help them infuse global knowledge in their K-12 classrooms. Faculty members in teacher preparation programs are responsible for producing the content. Therefore, faculty must be prepared to teach more than just pedagogical and subject area content knowledge. Faculty must have a strong understanding of multiculturalism and the skills to succeed in this changing global environment and still have the skills to design lessons that assist their students in learning the content, skills, and values of instruction. Additionally, faculty, need to care enough about global issues to use their knowledge and skills to bring about conditions that address current social problems. A recent study on *Scholars in the Changing American Academy* (Cummings & Finkelstein, 2011)

looked at how well-positioned the new generation of U.S. faculty are to contribute to the newly globalized academic profession. The results are troubling: new faculty are as likely as senior faculty to report English as their first language (85%) and no more likely (12%) to report experiences teaching abroad or in a different language. Even more troubling is the fact that newly entering faculty members are less likely to report that their research is international in scope or orientation than their senior colleagues (35% versus 44% among senior faculty). Only 33% of research-active U.S. faculty reported collaborating in international research with colleagues and only 5% reported publications co-authored with colleagues in foreign countries. In addition, U.S. faculty only rank fourth (17%) in the percentage of courses taught abroad. Also, U.S. faculty still ranked last among the fourteen countries in the percentage of articles published in a foreign country at only 7% (Finkelstein, 2011; O'Hara, 2009). However, an important factor in publishing is that many major publishing centers are in the United States.

A contributing factor to this troubling situation is the structure of academic careers in the U.S. The tenure system may make it difficult for new faculty to internationalize their teaching or research, especially if it involves going abroad. Nonetheless, the data suggest that there is no evidence of a great generational increase in international outlook.

Purpose of this Study

Teacher education is emerging as an essential element to improving education. The American Council on Education (ACE, 1999), speaking for the leadership of higher education, has called for moving the education of teachers to the center of the higher education agenda. A new generation of teacher education faculty members that can contribute to the newly globalized academic profession is a vital source for national growth in a global economy. Hong Kong, recognizing the need for the internationalization of education and the link to economic growth

recently underwent a major educational reform with an emphasis on liberal studies and globalization (Progress Report Education Reform 2, 2003). However, in New York, a multicultural city, much has been written about the need for internationalization of the school curriculum and creating global citizens, but no major reforms or changes have taken place (Blum, 2006). There are initiatives in place like the High School for Global Citizenship (HSGC), a small school in Brooklyn, which aims at creating a democratic community of active learners who understand the connections between their own lives and international events (Theroux, 2007). Therefore, for this study, the focus will be on these two global cities and assessing the extent to which and the ways in which they have sought to internationalize the preparation of their teaching force (Khalideen, 2006).

Research Questions

Based on its stated purpose, this study collected data to answer the following research questions:

- (1) How do teacher education faculty at the two case sites differ in terms of the extent and patterns of the internationalization as reflected in the content of their courses and the composition of their professional networks?
- (2) What factors combine to explain both the extent and pattern of internationalization of course content and professional networks?

Defining Internationalization

To do a meaningful comparison of teacher education faculty in New York in terms of internationalization in comparison to teacher education faculty in Hong Kong, it is important to define internationalization. Internationalization of education can have many definitions and mean different things to different people, which affects the different ways in which institutions

of higher education implement internationalization. Internationalization has been conceived as study abroad, faculty joint or collaborative research across national borders, international internships, faculty and student exchanges, and curricular development (Knight, 2004). After a careful review of the literature on internationalization, we adopted a focus on internationalization as the reformulation of instructional content in teacher preparation programs (Khalideen, 2006). In Chapter Two, the literature review will elaborate on various elements of internationalization of content such as rationales, strategies for internationalizing content, and finally, what defines and characterizes internationalized content. Based on the review, I adopt for my study the definition of internationalization as "the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of post secondary education" (Knight, 2004, p 7.) For this study, the key elements for measuring internationalization are the integration of international content, integration of international student professional networks, and faculty research and professional networks abroad. The integration of international content will be measured by the course content, course topics, and specialized courses with an emphasis on the integration of politics, economic, and cultural/social context (Khalideen, 2006; Odgers & Giroux, 2006; Qiang, 2003). The integration of international student networking opportunities will be measured by analysis of teaching practices including assigned readings, course illustrations, international students serving as cultural resources, sharing faculty experiences from working in other nations, and the use of technology for international collaborations. Faculty research and professional networks abroad that place faculty as the link between curriculum and the students and will be measured by faculty experiences including joint research, joint presentations, joint publications, and research abroad.

Definitions of Terms

Globalization - a process that affects environmental resources, culture(s) including people's well-being, political systems, national sovereignty, national security, agriculture, public health/health care, economic systems/international trade, transportation, information technology/communication, education, and global governance. The primary result of this process has been the integration of capital, technology, information and people across national borders (Schneider, 2003). It is defined as the process of international integration, which is arising from the interchange of views around the globe.

Internationalization - "the process of integrating an international, intercultural, or global dimension into the purpose, functions, or delivery of post-secondary education" (Knight, 2004, p. 7); it is defined as a process of generalizing so that one product or services can be handled in multiple languages and cultural conventions without the need for re-design.

Politics, economic and cultural social context – in line with the definition of globalization and according to Qiang (2003), Odgers and Grioux (2006), and Khalideen (2006), frameworks for internationalization will include topics of political systems, national security, public health, economic systems/international trade, global governance, education in different nations, and discussion of ways in which people of different cultures interpret their own life experiences and those of others.

Summary

With the increasing integration of the world economy, nations are increasingly under pressure to compete internationally, which directly translates into increasing pressure to re-shape national education systems to train a multi-cultural workforce capable of competing globally.

This research study examined the internationalization of teacher education faculty through case studies of two universities, one in New York and one in Hong Kong.

Outline of Study

This study consists of five chapters. Chapter One describes the relevance and significance of the study and the problem it addresses. It also outlines the study's purpose and defines internationalization for the purpose of this study. Lastly, it defines terms unique to the study or those with multiple possible definitions.

Chapter Two includes a review of the relevant literature on the aspects of internationalization of higher education and an overview of teacher education practices. It also includes a review of the relevant literature on the aspects of internationalization of teacher education and the key elements to measuring internationalization. Chapter Two ends with a review of the literature on the characteristics of internationalization, the rationale for internationalization of content, and the different perspectives and strategies to integrate international topics into the curriculum.

Chapter Three covers the research methodology used in the study. It thus describes the conceptual framework, observed sample, the data collection and survey instrument employed, and the process of data collection and analysis. It also lists the indicators for internationalization and the guiding research questions. Lastly, it describes the limitations of the study.

Chapter Four describes the findings of the study. It explains the outcome of the research by providing descriptive data on the sample, the patterns of internationalization of each subsample, and the factors that shaped or predict the internationalization in the two settings.

Chapter Five summarizes and interprets the findings. It also makes recommendations relevant to teacher education faculty in the areas of internationalization of curriculum and professional networks and offers some ideas for further research.

CHAPTER 2: REVIEW OF LITERATURE

The purpose of this study is to examine the internationalization of teacher education faculty through two global case studies. These case study sites are situated in universities in Hong Kong and New York. In this chapter, literature is detailed pertaining to how internationalization has led to highly porous borders and how this is affecting higher education institutions

In the context of the research question and purpose, this literature review will address internationalization's latest trends in education and what defines internationalization of content and curriculum. First, it will look at where we are today in higher education internationalization, and specifically how it applies to teacher education. Second, it will address various components of internationalization of content such as rationales for internationalization, integration of an international dimension into the curriculum and strategies for internationalizing content.

This will be done under the headings of: (1) international students, (2) aspects of internationalization of higher education, (3) teacher education overview, (4) internationalization in teacher education, (5) characteristics and what defines internationalization, (6) rationales for internationalization of curriculum, (7) integration of international perspectives into the curriculum, (8) strategies for internationalizing curriculum, (9) internationalization of higher education and global integration, and (8) higher education and internationalization. The data collected for these sections were retrieved through a strategic search of online international publications through Google Scholar.

Search terms included, but were not limited to: *internationalization, internationalization* higher education, internationalization teacher education, internationalization curriculum, teacher education, measuring teacher education, trends in teacher education, higher education

and global integration, measuring internationalization, characteristics of internationalization, internationalization universities, internationalization definitions, teacher education, and perspectives of internationalization. Most of these terms were uncovered from a search of scholarly articles dating from 2014 onwards. The first section of discussion is international students, as it is this body of the student population that has inspired trends toward internationalization in higher education (Knight et al., 2015).

International Students

According to Goodwin and Nacht (1991), the presence of international students is often highlighted as a major indicator of university campus' internationalization. During the past few years, most the flow of international students has been from developing countries to industrialized countries (Perkins & Neumayer, 2014). A UNESCO report highlighted that over 1,000,000 foreign students traveled abroad to attend higher education institutions throughout the world. It is also highlighted that one-third of these students went to the United States. The other leading countries were France, Germany, the United Kingdom, Australia, and Canada (Killick, 2008).

Blackburn and Lawrence (1995) originally argued that the cultural diversity assist internationalizes the host university campus, and the international students add to the local community and economy, a sentiment that has been repeatedly found in the more recent literature (Leask, 2016). It is also estimated that in the United States, international students bring almost \$7 million into the economy annually (Soria & Troisi, 2014). The Canadian education center network highlighted that the value of international students can never be overemphasized, stating that about 200,000 international students come to Canada annually and that they bring about \$4 billion to the Canadian economy (Scott et al., 2015). Moreover, Goodwin and Nacht

(1991) stated that usually the international students usually pay full or double tuition, which financially benefits the universities and colleges.

The presence of international students has been seen as vital to the intellectual health of universities (Choudaha, Chang, & Kono, 2014). This is especially important at the graduate level, where the presence of international students has ensured the sustainability of some academic programs, especially in science and engineering (Alves et al., 2015; Nonis & Hudson, 2015). International students enrich the university campuses and the quality of programs, as well as serve as ambassadors when they return home (Parkes & Griffiths, 2008). They bring with them their cultural viewpoints such as values, beliefs, patterns of behavior, and ways of learning and thinking (Newsome & Cooper, 2016). They enrich the intellectual and social life of the campus, often being very influential in the internationalization of the academic and community environment (Lee & Ciftci, 2014).

Another benefit is the potential for long-term commercial, trade, and diplomatic links with other countries (Barratt, Chawla-Duggan, Lowe, Nikel, & Ukpo, 2006). But often, the input that international students could have on a campus is largely ignored (King & Gardiner, 2015). Faculty needs to learn to use the human resources available to them (Schneider & Burn, 1999). Departments need to develop ways to take advantage of the perspectives and expertise of these students (Quaye & Harper, 2014). Blackburn and Lawrence (1995), in their discussion of a study on the importance of international students in university programs, highlight several ways that faculty can get to know their students early in the course, to include their experiences in the classroom activities:

- 1) develop a method for students to tell something about themselves;
- 2) ask about international or cross-cultural experiences;

- 3) include international students without making them feel different;
- 4) enquire as to what languages are spoken in the class;
- 5) ask about different teaching strategies the students may have encountered, especially abroad, and ask which styles work best for them; and
- 6) share their international experience and linguistic background, if appropriate (p. 82).

Blackburn and Lawrence (1995) suggest that the international flavor should reach beyond the campus and impact the community, especially in the K-12 school systems. A program designed by the University of Alberta does just that. It offers a "Bridges: Student Speakers for Global Awareness" program whereby international and Canadian students with significant international experience are afforded the opportunity to share their experiences and views of global issues within the schools (Mandal et al., 2014). In addition, this program provides opportunities for students to develop their public speaking and presentation skills, as well as interpersonal skills (Mok & Cheung, 2011).

The goal of the program is to help break through stereotypes and educate students about other cultures and global issues (Anderson, 2015). Students involved in this program are provided off-campus speaking opportunities, such as elementary schools, senior care homes, community organizations and post-secondary classrooms (Reitz, Curtis, & Elrick, 2014). They also participate in a training program to help prepare them for these opportunities (Reitz et al., 2014). The students develop presentations on a variety of themes that can include regional or country-specific information or discussion of various relevant issues as seen from another perspective (Reitz et al., 2014). In this way, the students can share their experiences and stories in the community, show how local and international issues are connected, provide more realistic

pictures of the country they are speaking about, and encourage other students to take advantage of overseas opportunities (Quezada, 2010; Reitz et al., 2014).

There are several issues related to international students that need to be addressed by individual universities (Knight, 2015). Admission procedures at Canadian institutions are typically slower than such countries as the United States, Australia, and the United Kingdom (Coates & McCormick, 2014). There need to be adequate staffing, clear policies and the use of technology to speed this up (Verbik, 2015). Some institutions in Canada have made some of the following changes:

- 1) a single point of contact for international students (Coates & McCormick, 2014);
- 2) making international students a priority (Coates & McCormick, 2014);
- 3) sending acceptances by fax or courier (Houshmand, Spanierman, & Tafarodi, 2014);
- providing greater human resources to the admissions office (Parkes & Griffiths,
 2008);
- 5) developing a way to track international students through their campus computerized information system (Parkes & Griffiths, 2008);
- 6) publishing and distributing admission material much earlier than previously and developing expeditious admission processes (Zhou & Zang, 2014);
- 7) issuing two letters of admission; one for visa application purposes and another detailing the academic prerequisites that the student must meet (Zhou & Zang, 2014);
- providing an international application form and accepting faxed and online admission applications (Wilkins & Huisman, 2015);
- permitting payment of fees by credit card, internet or bank transfer (Wilkins & Huisman, 2015);

10) providing human resource training so that competent and skilled people are available to assist international students in their application process (Glass & Westmont, 2014).

International students need knowledgeable and caring people who can help them as they attempt to wade through the necessary paperwork, achieve financial stability, develop a support network, learn to be successful in a new culture and educational environment, and often a new language (Poyrazli, 2015). There is often a great deal of inward and outward pressure on students to succeed (Poyrazli, 2015). Students also need orientation as they prepare to return home (Poyrazli, 2015). The experience of living in a new country has changed them, but they may not even be conscious of the change (Robertson, Holleran, & Samuels, 2015). Their perspectives and understanding may become different, including their perception of their home country (Robertson et al., 2015). Transition to their home country and culture will not be as easy as they might think (Mok & Cheung, 2011). Those who work with students also should remember that students from different areas of the world may have different needs, and graduate and undergraduate students' situations and concerns may vary greatly (Robertson et al., 2015).

One concern that was mentioned frequently was the need to avoid "ghettoizing" the students by placing them in circumstances, especially housing accommodations, that keep them separated from the mainstream of students (Drazan, Cooke, & Eglash, 2016). International students would benefit from opportunities to mix with non-international students, be it in the residences or in student lounge areas to become integrated into campus life (Drazan et al., 2016). A number of areas need to be evaluated to be sure that universities are sufficiently meeting the needs of international students (Alonso & Lombardo, 2016). These would include arrival and departure assistance and orientation, academic and financial advising, accommodation, peer and

community support, work and internship opportunities, personal counseling, and social integration (Alonso & Lombardo, 2016).

To conclude this section, it is clear that recently published literature is calling for ethical practices in attracting international students to university campuses (Thomson & Esses, 2016). Internationalization should not be solely for the gain of the institution and its country (Thomson & Esses, 2016). To attract international students, universities must be sensitive and conscious of the needs of both the students and their countries (Parkes & Griffiths, 2008).

Aspects of Internationalization

There are two aspects to the internationalization of higher education according to Teichler (1999; 2004; 2009). The first one is physical border crossing (Teichler, 2009). The movement of students, scholars, and ideas across national boundaries was a prominent feature of twelfth and thirteenth century Europe (Hallavant & Ruas, 2014). Communities of international scholars formed as a result at several prominent universities (Wildavsky, 2010, 17-18). This mobility significantly subsided after the fifteenth century until the latter half of the twentieth century (Hollifield, Martin & Orrenius, 2014). In the last several decades there has been a significant increase in the cross-border flow of students, scholars, and ideas as well as global growth in higher education enrollment with a fifty-three percent increase between 2000 and 2007 in overall higher education enrollments (Albatch, 2009; Hollifield et al., 2014).

The second aspect of internationalization of higher education is a newer trend which goes beyond border crossing mobility and cooperation (Teichler, 2009) including the internationalization of substance and functions of higher education (Khoo, Taylor, & Andreotti, 2016). This includes the internationalization of teaching, research, and service mission of higher education at the home institution (Khoo et al., 2016). This aspect of internationalization

provides access to many (Khoo et al., 2016). According to Altbach (2009), the "massification" of higher education globally will mean a movement away from elite to more widely accessible models. These models bring access to all by bringing international content and perspective into learning, research, and outreach for all students and faculty in their home institutions (Altbach, 2015). This aspect of internationalization is a movement towards integrating international perspectives into the core activities and curriculum and moving away from just the internationalization of some activities (Altbach, 2015). It is a movement towards developing long-term relationships on equal terms and creating policies of internationalization (Altbach, 2015).

Many developing countries in the world now depend upon the internationalization of higher education institutions for promoting social awareness and global connectedness for their institutions (Rui, 2014). A prime example of this is China, who over the past decades has used internationalization in higher education as a means of transforming the Chinese education system into one of the largest and most promising in the world (Rui, 2014). Both aspects of internationalization have helped promote these new trends in China, suggesting that when a country deems internationalization as a core part of the curriculum within its higher education institutions, it can benefit enormously from both the physical influx of foreign students and the wealth of knowledge that they bring (Rui, 2014). However, to take advantage of this benefit means that advancements are needed in how higher education staff are trained within the context of internationalization. The following section is an overview of teacher education and how this relates to teacher quality in an internationalized world.

Teacher Education Overview

Teacher education has a historical connection to the production of teachers for a specific locale governed by professional accreditation authorities that graduate students on the basis of having knowledge of state-based curriculum requirements (Quezada, 2014). This paradigm brings challenges to the movement towards internationalizing teacher education practices, adding to the already existing debates over teacher quality (Quezada, 2014). Quality of teachers and teaching are among the most important factors shaping the learning and growth of students (Ingersoll, 2007). The two most prominent viewpoints over teacher quality are that 1) poor quality training and inadequate government certification standards result in poor teacher quality and poor student performance and, in contradiction, 2) "entry into teaching occupation already is plagued by unusually restrictive and unnecessarily rigid bureaucratic entry barriers" (Ingersoll 2007, pg. 2).

Researching teacher education can be difficult (Darling-Hammond, 2016). This difficulty was made evident in a study by Darling-Hammond (2016), who used the five AERA presidential addresses over the last fifty years as landmarks to trace the evolution of research on teaching and teacher education, as well as look at some critical impacts that the research had on policy and practice related to teacher education and teacher evaluation. In the discussion, Darling-Hammond (2016) showed how these addresses reflected both progress as well as challenges at the time that they were delivered. Following a major presidential address, the education research community has, and will in the future, influence future research within the educational community. Darling-Hammond (2016) also argues that these speeches are a physical trace of key influences on the quality of teacher preparation, assessment of teaching effectiveness, and competition conceptions of teacher accountability.

It is also suggested that the growth of internationalization within education has been influenced by government and globalization trends (Darling-Hammond, 2016). In a similar study published the following year, Darling-Hammond (2017) described teacher education in jurisdictions around the world, and how they too have been influenced by political undercurrents. However, the core arguments for the research study revolve around an examination of teacher education policies in Australia, Canada, Finland, and Singapore (Darling-Hammond, 2017). Each of these four countries has exhibited expansion within its education systems that accompany global trends, suggesting that aspects of internationalization are also being influenced by political motives (Darling-Hammond, 2017). Forzani (2014) argues that these movements are indicative of a shift from practice-based teacher education, to competency-based teacher education over the last hundred years or so. Forzani (2014) argues that, in recent years, a small but growing strand of research has investigated ways of focusing teachers' professional education on core and high-leverage practices of teaching.

Other debates on teacher education focus on what kinds of subject matter and how much pedagogical preparation of these do prospective teachers need (Mok & Chan, 2016; Wilson, Floden & Ferrini-Mundy, 2001). Researchers have found problems with the typical subject matter knowledge of prospective teachers, even those who have completed majors in academic disciplines (Mok & Chan, 2016). Pedagogical preparation refers to the courses that prospective teachers take in areas as instructional methods, learning theories, foundations of education, and classroom management (Ingersoll, Merrill, & May, 2014).

To conclude, the content for these focus areas can vary widely, and there is still on-going debate in need of further research as to which aspects of pedagogical preparation are most

critical (Ingersoll et al., 2014; Wilson et al., 2001). The following section looks into what internationalization has meant for teacher education.

Internationalization in Teacher Education

Internationalization of higher education takes on diverse forms, such as the delivery of programs offshore; bringing foreign students into institutions; forming branch campuses; building partnerships and collaborations with overseas institutions; mobility of students and scholars across national borders; and the most recent integration of intercultural and global dimensions into curricula (Knight, 2003; 2015). Teacher education occupies an interesting and uncertain place in the movement towards internationalization because of the historical connection to the production of teachers for a specific locale governed by professional accreditation authorities that graduate students on the basis that they have knowledge of state-based curriculum requirements (Duong & Chua, 2016). At the same time, the same "...professional accreditation authorities require graduates to be prepared for the social, cultural, ethnic, linguistic and religious diversity of contemporary student populations, while State systems and their curriculum frameworks refer consistently to the preparation of students for a globalized work and labor force" (Parkes & Griffiths, 2008, p.1).

Because of the accreditation requirements of prospective teachers, teacher education programs do not have the flexibility to expose their students to globally focused courses (Keith & Van Belle, 2014). Richard Lambert, in a study of undergraduate programs in nearly 50 colleges and universities, found that education majors have less exposure to internationally focused courses (Lambert, 1989). So what exactly is the integration of an international dimension into teacher education training? Because internationalization of education can take

diverse forms, it is important to define and select for this study the key elements to measuring internationalization.

What can be determined from internationalization and teacher education is that both are essential in combination to negotiate critical differences for social justice given the global transformations of the last two decades argues Watt (2016). This comes after advances in technology, increased student and faculty mobility, and other economic factors (Watt, 2016). Watt (2016) grounds his argument in the drastic amount of negative attention currently being received by Muslims in Western nations. By educating the masses in the new trends and knowledge gained by internationalization, racism could be diminished through the growth of education as a whole (Watt, 2016).

Watt (2016) argues that there is a trend of viewing Muslims through a reductive lens, despite there being no essentialized, unified Islamic world about which the rest of the human species can make complicated generalizations, and yet this appears to be occurring through a lack of general knowledge. Fixed meanings have proliferated through discursive contexts of schooling, society, and mainstream media, which is why Watt (2016) argued that teacher candidates need to be attentive to processes that have the potential to mitigate this negative imagery, which can then be handed down to students. One of the easiest means of achieving this outcome is to expand individual, national, and international contexts of subject areas related to specific social injustices (Watt, 2016).

As education overhaul has been achieved before, with studies such as Quezada and Cordeiro (2016) citing past examples pertaining to the Council for the Accreditation of Educator Preparation. Over the last decade, changes have been made to introduce international contexts to the standard North American curriculum, but this has also been promoted through

nongovernmental organizations and foundations that allow for students and teachers to broaden their international opportunities (Quezada & Cordeiro, 2016). These new opportunities also present areas of advancement in curriculum through experience in foreign countries (Quezada & Cordeiro, 2016).

Just as internationalization in education has been promoted by teachers traveling abroad for semesters, the influx of foreign-born families has also prompted the necessity for internationalization in teacher education (Apple, 2017). In the 2007 census, more than 10 percent of the United States population—roughly 38 million people—were identified as foreign born, with first-generation individuals now being one in every eight persons in the country, with 80 percent of these individuals coming from Latin America and Asia (Apple, 2017). Figures are similar for neighboring countries, such as Canada (Apple, 2017). Therefore, Apple (2017) argues that now is the essential time to introduce international and globalized educational curriculum for both prospective teachers and students alike.

The generalization of studies across national contexts as limited was prevalent up until as recently as a decade ago. This may be one of the limiting factors in measuring internationalization. Knight et al. (2015) argued that the reason it is so difficult to determine the direction of influence is that schools and colleges of education have been the least internationalized units in American university campuses. It was only relatively recently that interest around issues of internationalization and globalization of teacher education emerged, resulting in a standing committee on Global Diversity and a Topical Action Group on the Internationalization of Teacher Education at AACTE and the establishment of a goal for *JTE* to attract and publish more international research on teacher education (Knight et al., 2015).

Unlike the last ten years of research and prior, most major publications and journals are now accepting international contributions on teacher education, as there is now a perception of significant value in these studies (Knight et al., 2015). The recognition that international research can contribute to U.S. teacher education has occurred at a time when researchers such as Knight et al. (2015) are questioning whether teacher preparation programs should prepare teachers for multiple settings and types of students, or whether the direction should be for more specific types of settings and students. In other words, we are questioning the generalizability of teacher education, which was the reason for initially limiting research on teacher education to national settings.

Knight et al. (2015) state:

When teacher preparation programs placed the majority of their students in nearby schools that mirrored the demographics and features of their field experience settings, the goal of matching the features of teacher preparation programs to target contexts was achieved without the conscious intervention of teacher educators. However, now that the demand for teachers is in settings unlike those in which they are being prepared, consideration of context specificity in teacher preparation and professional development is of utmost importance. Much of the need has been for preparation for urban settings. Other recent phenomena related to supply and demand issues and budget cuts for education have also resulted in teacher preparation programs preparing teachers for out-of-state settings that may differ considerably from the in-state contexts where previous graduates remained. For example, teachers prepared by Penn State University are increasingly taking teaching positions in states where demand is higher than in Pennsylvania. Tailoring features of a program to reflect demands of a specific setting is

difficult when there are multiple, varied target contexts. It is with this dilemma in mind that the internationalization of teacher education and research in international contexts plays an important role. (p.3)

To conclude this section, it is clear that the research on internationalization and education is new, meaning that a wealth of research is needed for the fullest understanding of the influence on teacher education. This study will contribute to the growing body of research in this field. However, limitations also exist in the extent to which internationalization has been defined and characterized, making studies such as this somewhat more complex. The following section continues with this discussion.

Characteristics and What Defines Internationalization

According to Qiang (2003), higher education can no longer be viewed in a strictly national context. Therefore, a broader definition of internationalization, which embraces the entire functioning of higher education and not merely a dimension or aspect of it, or the actions of some individuals which are part of it, is needed (Cabrera & Le Renard, 2015). The definition most widely used was recommended by Knight (2004), who stated that internationalization "is interpreted and used in different ways in different countries and by different stakeholders" (p. 6). Knight (2015) defined internationalization as "the process of integrating an international and intercultural dimension into the teaching, research and service functions of the institution" (p. 7). Nilsson's (2000) definition incorporated the international and intercultural and the development of knowledge and skills, and more specifically, it included performance objectives. Knight (2004) defined it as "a curriculum which gives international and intercultural knowledge and abilities, aimed at preparing students to perform (professional and emotionally) in an international and multicultural context" (p. 21).

Internationalization of curriculum has been developed based on different rationales and using different strategies (Hawawini, 2016). Nevertheless, Freedman (1998) stated that "sound international curriculum needs to be designed with an eye toward social transformation, constructivist principles of learning interdisciplinary content and diverse modes of representation" (p.50). Freedman (1998) added that "curriculum must reflect the complexities of global existence and be based on visual as well as textual and numerical cultural carriers" (p.50). Internationalized curriculum will include socio-cultural and disciplinary contexts. According to Freedman (1998) when internationalizing curriculum or content, one must think of culture as being local and global as well as national and include in the curriculum various forms of international visual culture that influence global knowledge.

Published in a special edition of the International Higher Education journal, an article by Beelen and Jones (2015) argued that recent discussions of internationalization within higher education are being beaten down by the constant introduction of new terms and definitions. This trend has been highly criticized; however, Beelen and Jones (2015) understand the importance of clarifying the concept of internationalization at home, but continue to urge researchers to not introduce any additional new terms to the study. This comes at a time when Beelen and Jones (2015) also proposed a new definition of internationalization at home, but claim that defining it does not guarantee its implementation, as there are still fundamental challenges to overcome in the redefinition of internationalization.

Beelen and Jones (2015) argue that the concept of internationalization at home plays a useful role in certain contexts, such as emphasizing efforts on mobility, as well as all of the benefits that this new-found mobility will allow for both domestic and foreign students.

However, Beelen and Jones (2015) go on to argue that mobile students will continue to make up

a relatively small proportion of the student body, and internationalization at home is a convenient term to designate internationalization activities aimed at the whole student body, despite it not being technically as all-engrossing at it appears. Despite the clarity of definition, Beelen and Jones (2015) argue that internationalization has become an item in the educational policies of the European Union's member states, with some countries such as the Netherlands already implementing internationalization into the higher education institutions, despite having no clear meaning behind the term. They state:

With the attention on internationalization at home increasing, it is all the more important that the concept is understood clearly, and shared understanding is not simply assumed the original definition of internationalization at home, dating from 2001, was not very helpful: 'Any internationally related activity with the exception of outbound student and staff mobility,' The confusion centers around the overlap between internationalization at home and internationalization of the curriculum as it has developed as a concept, particularly in Australia and the United Kingdom... Internationalization of the curriculum, on the other hand, refers to dimensions of the curriculum regardless of where it is delivered. In this sense it may include mobility for the students that choose that option, or it can refer to curriculum for transnational or other forms of cross-border education. (Beelen & Jones, 2015, p. 12 - 13)

Even when the conceptual fog lifts and concepts are cemented in home nations, a big challenge remains: supporting academics so that they can capture intended internationalization in learning outcomes, plan assessment and design learning environments that enable students to achieve intended learning outcomes. The real challenge is to contextualize internationalized learning outcomes in individual programs of study and support academics in crafting outcomes

and assessment. For this, they need support from both educational and internationalization experts. When the new definition is finally developed, it will, hopefully, contribute to reaching a common understanding of internationalization at home, which may assist in this challenging task (Beelen & Jones, 2015).

To conclude this section, clearly issues remain in the clear definition of internationalization. However, broad strokes can be made regarding what internationalization means for higher education institutions, as well as how it appears in practice. The following section continues with this theme in justifying internationalization within the curriculum.

Rationales for Internationalization of Curriculum

There is a need to internationalize education, but Clifford and Montgomery (2015) ask, what is the rationale for an internationally oriented curriculum as the most effective tool to internationalize teacher education programs? Internationalization means different things to different people, which results in great variation in curricular initiatives implemented under its aegis (Clifford & Montgomery, 2015). International education has been defined and operationalized as study abroad, faculty joint (i.e., cross-border) research, international internships, faculty and student exchanges and curricular development (Knight, 2004). These activities provide a human development element important to internationalization; however, this definition does not generate internationally-oriented curricula (Clifford & Montgomery, 2015). This study will focus specifically on the internationalization of curriculum.

Internationalization of curriculum should incorporate topics concerning conditions in nations around the world that prepare teachers to adjust to and contribute to a rapidly changing world (Kahn & Agnew, 2017). Khalideen (2006) agreed with this sentiment and put curriculum as the main vehicle for internationalizing higher education to raise global consciousness.

According to Khalideen, for internationalizing curriculum to be visible, one must place "curriculum as the vehicle to achieve this goal" (p.1). Although there are many diverse rationales for internationalizing curriculum, some of the most frequently recognized rationales put curriculum in the center of internationalizing higher education (Gopal & Zha, 2015). According to Odgers and Giroux (2006), researchers place the curriculum at the center of any attempt to internationalize higher education, with "curriculum being the primary vehicle for accomplishing internationalization" (p. 4). Ellingboe (1998) stated that "internationalizing curriculum improves, enhances, and benefits higher education, according to many leading scholars who have written about the urgency to interject comparative and international perspectives into many of the disciplines taught at colleges and universities" (p.198).

In internationalizing the curriculum, Khalideen (2006) suggested "that a framework for internationalizing the curriculum must consider how power, politics and ethics within the university context impinge on curriculum reform" (p. 5). Historically, the most common framework applied has been political and economic (Leask, 2014). The political framework has always been in existence with international education and is seen as a "beneficial tool for foreign policy especially with respect to national security and peace among nations" (Knight, 2004, p.17). The economic framework is important to institutions of higher education with some countries considering the marketing of higher education to the international market as the export of goods (Leask, 2014).

The framework for internationalizing the curriculum must include politics and economic dimensions, but places the emphasis on academic and cultural social dimensions as rationales (Gopal & Zha, 2015; Qiang, 2003. Odgers and Giroux (2006) agreed with Gopal and Zha (2015) in that a cultural social framework is essential for the internationalization of the curriculum.

Odgers and Giroux (2006) argued that it is not contacts between individuals and groups coming from different cultures that necessarily lead to culture learning or appreciation but that "one must have a consciousness of the experience, and well-planned curricula provide the constructs for such a consciousness to develop" (p. 6). According to Sarles (1998), students in the United States have been "socialized to their own culture by osmosis as well as by education, although studies indicate they have great cognitive gaps in understanding their own country" (p.136). Sarles (1998) stated that students from the United States "also need to know about the vastly different ways in which people of different cultures interpret their own life experiences and those of others" (p.136). In this changing global world, the students from the United States will progressively work more with people in other countries (De Wit, 2015). To ease successful interactions and mutual understanding, students from the United States will need a deeper awareness of who they are, and who others are (De Wit, 2015). Lastly, there is the academic framework for internationalizing the curriculum, and this assumes that the quality of higher education is enhanced with the internationalizing of teaching, research, and service (Knight, 2004).

Overall, the frameworks for internationalizing the curriculum differ slightly by scholar, but most agreed that an internationally-oriented curriculum and an increase of international area studies courses are the main vehicles for internationalizing higher education (Urban & Palmer, 2014). According to Knight (2004), developing internationalized curriculum and content provides the tools for developing the appropriate competencies in the faculty so that they become more internationally knowledgeable and inter-culturally skilled. Mestenhauser (1998) stated that much of what is seen in international education in the United States is "minimalist, instrumental, introductory, conceptually simple, disciplinary-reductionist and static" and that "there is an

urgent need to study international education on the higher level of sophistication as a multidimensional, multiplex, interdisciplinary, intercultural, research and policy-driven system of global scope at all levels of education" (p.7). Killick (2008), when referring to the developed view of internationalization of the curriculum, stated that "to live and work successfully within this globalizing world all our graduates need attributes which extend beyond the knowledge and skills traditionally delivered within a purely discipline-focused curriculum" (p.3).

Integration of International Perspectives into the Curriculum

Scholars also had different opinions on how international topics and perspectives should be integrated into the curriculum (Christensen, 2017). Internationalization of the curriculum should strengthen with the integration of new international topics into existing courses (Autio, 2014; Cogan, 1998). Cogan (1998) referred to the "integration of examples of research and scholarly work into assigned courses" (p.106). Integration of international perspectives should be included in assigned readings, class illustrations, faculty sharing experiences from working in other nations and the use of course assignments. Cogan (1998) added that internationalization of curriculum should be done through full integration and by "using the representative diversity of the student demographics in the classroom as a teaching tool allowing the students to use their own experiences to dialogue about the multiple perspectives on their various content topics and issues under discussion" (p.116).

Many scholars focus on the rich diversity amongst the students in the classroom as a teaching tool and argue that intercultural elements must be integrated into the curriculum (Niehaus & Williams, 2016). Odgers and Giroux (2006) claimed that the on-going internationalization effort must be interdisciplinary, intercultural, and transformative in its approach. Odgers and Giroux maintained that it "needs not only deal with newly arriving

students from other places but also with local students who bring their own language, culture and identity to the learning context and who equally need to be able to respond productively to the cultural context in which they now find themselves" (p.7). Mesternhauser (1998) also believed that integrating intercultural elements into the curriculum is essential. According to Sarles (1998), intercultural integration is essential because "communicating cross-culturally reduces uncertainties arising out of cultural differences and facilitates discussions even on controversial and emotionally loaded issues within the framework of academic discourse" (p.137).

Institutes of higher education interested in internationalizing the curriculum should remind themselves that "intentional and spontaneous post-intercultural events are very much underway at the organizational and personal levels" (Harkins, 1998, p. 74). Harkins (1998) added that "were academics more inclined toward recognizing, stimulating, and rewarding intentional innovations and spontaneous emergency of cultures at either level, such a reminder would not be required" (p. 74). Ellingboe (1998) also agreed that an internationalized curriculum must revise core courses in most majors to include international, comparative or cross-cultural elements of the disciplines.

Others, however, see the involvement of faculty and staff as the key element for infusing international content and perspectives into the curriculum (Niehaus & Williams, 2016). With curriculum being the main vehicle for internationalizing higher education, there is concern about who is interpreting the curriculum (Niehaus & Williams, 2016). According to Cogan (1998), integration of international content into the curriculum "does require some international experience, so that one's assumptions about the world and the way in which we do things are challenged" (p. 116). Killick (2008) agreed "that staff is the link between the curriculum policy and students" (p. 5). He stated that "the role of academic staff in interpreting curriculum policy

at the discipline level is an important one which requires significant attention and support, and that the role of professional staff is also critical in ensuring that a campus culture of internationalization exists and intercultural engagement is modeled" (p. 5).

According to Odgers and Giroux (2006), internationalization of curriculum falls into the domain of responsibility of faculty. It is not only the curriculum but also the faculty who lecture—or the act of teaching—as a central feature that determines the results in the international classroom (Morris, Niehaus, & Williams, 2016). Faculty can use their own research, study abroad, and international consulting and conference attendance to enrich and enliven a course capitalizing upon the opportunities of an international nature at the institution and taking advantage of related opportunities (Cogan 1998; Morris et al., 2016).

Another component of integrating international content into the curriculum getting a lot of attention by scholars is the use of technology (Arrowsmith & Mandla, 2017). The use of technology has facilitated international education and the sharing of curriculum and ideas to internationalize the curriculum (Arrowsmith & Mandla, 2017). According to Philson (1998), "an increase of national and international exchange of ideas is a result of the electronic communications" (p. 151). The integration of international content and perspectives into the classes has been facilitated by the use of technology (Sabin, Snow, & Impagliazzo, 2016). Faculty and administrators who in the past found it difficult to incorporate international perspectives into their classes and institutions are more willing and able to exploit the opportunities provided by emerging technologies (Ramanau, 2016).

Philson (1998) agreed that "technologies bring the potential for access to resources and international collaboration never before possible. Students from universities around the world, not to mention students in the privacy of their own rooms can participate in the same class and

communicate with others both synchronously and asynchronously" (p. 172). The use of technology is a great asset in integrating international content into the curriculum, facilitating conversations and sharing of materials (Ramanau, 2016). Harkins (1998) related this to the Sim World style global models. Harkins added that "students could learn simulated investigative and developmental materials and roles as opposed to using dated resources within romanticized multiculturalists' ideologist" (p. 76).

Overall, this section suggests that it is up to the individual school or institution to define and develop curriculum that supports internationalization theories. Some means of achieving this pertain to technological advancements, as well as the spread of foreign students. This discussion will continue in the following section.

Strategies for Internationalizing Curriculum

Although there seems to be a consensus about the importance of internationalizing the curriculum, there are differences in the strategies and the challenges that come along with the process (Yemini & Giladi, 2015). The two most common challenges in the integration of global or international perspective into the curriculum are 1) a commitment to infuse international and comparative perspectives throughout teaching, research, and service missions, and 2) faculty inexperience (Leask, 2015). Briller and Ly (2008) maintained that "one of the greatest challenges of internationalizing higher education is integrating international perspectives within the curriculum and all units within the university" (p. 5). Briller and Ly added that another challenge is the "lack of up-to-date knowledge by faculty in their fields with regard to curriculum and course content" (p. 9). Mestenhauser (1998) also stated that "internationalization of the curriculum is the most difficult component of international education" (p. 8).

Qiang (2003), however, sees internationalization not so much as done by strategies but as a continuing process. Qiang (2003) argued that "the development of internationalized curricula and programs is not the end in itself but a means towards developing the appropriate competencies in the students, staff and faculty" (p. 250). Qiang (2003) added that the process of internationalization is cyclical not linear. Internationalization is an ongoing process, and with reinforcement and reward, it can lead to renewed awareness and commitment (Woodin, 2016). This renewed and broader base of commitment leads to further planning processes, and this usually stimulates changes to existing programs or policies and the development and implementation of new activities and services (Woodin, 2016).

Some commonly mentioned strategies for internationalizing curriculum include the infusion of cross-cultural elements (Douglas & Camp, 2015), faculty as the link between curriculum and the students (Wisniewska et al., 2014), and the use of technology for infusion of internationalization and incorporating international and intercultural elements (Mitchell & Vandegrift, 2014). Infusion of cross-cultural elements into the curriculum can be done through the assigned readings and the kinds of assignments given by the faculty (Agnew & Kahn, 2014). When internationalizing his curriculum, Cogan (1998) incorporated courses in social studies for in-service teachers, global environmental education, comparative education, and research topics in international development education (McGregor et al., 2014). Some examples of how to link the faculty to the curriculum would be to integrate the faculty's research and scholarship from working in other nations into assigned course work (McGregor et al., 2014). Cogan (1998) used his study and research abroad experiences in his class lectures. Cogan (1998) stated, "I find in each instance that students are interested that their professor has actually conducted research or studies abroad" (p. 114). Lastly, internationalizing the curriculum can be enhanced with the use

of technologies by providing communication exchanges of students and faculty through the use of discussion boards and video conferencing (Schwille, 2016). Also, faculty and students from different countries can collaborate on joint projects and research collaborations via the use of the internet and World Wide Web (Philson, 1998).

The intercultural component is central to internationalizing content (Berry & Taylor, 2014). Odgers and Giroux (2006) state that internationalizing curriculum is an intersection of the intercultural with the international as a central component. According to Odgers and Giroux (2006), "an international curriculum is one which has seamless connections to all the different cultures in the world and is transparent, if there are particular cultural biases where before it used to be built in and assumed" (p. 18). Briller and Ly (2008) suggested that internationalization of curricula must "integrate international perspectives into all curricula and co curricula programs" (p. 5) and that the university's general education requirements must have a strong international dimension, exposing every student to global perspectives (historical and current) within the required curricula and provide multiple opportunities to compare different cultural and country approaches to the major global opportunities and issues of this century.

The professional development of faculty as the link between the international curriculum and the students is a strategy suggested by several authors (Altbach, 2015; Bedenlier & Zawacki-Richter, 2015; Maringe & Sing, 2014). Briller and Ly (2008) argued that for internationalization of curriculum to be effective, "faculty should practice global competence on campus and be actively engaged in international academic communities" (p. 11). According to Briller and Ly (2008), "globally competent faculty members frequently integrate international dimensions and multicultural comparisons into their courses; thereby teaching their students the value of varied perspectives" (p. 11). Odgers and Giroux (2006) also suggested that for internationalization of

curriculum to be effective, institutions should promote, encourage, and provide values and rewards to internationally engaged faculty and staff.

Odgers and Giroux (2006) added, "the internationalized university has a diverse faculty and staff, the majority of whom have international experience" (p. 8). Mestenhauser (2000) observed that faculty often expect students to experience and be capable of skills that faculty do not possess. Internationalization of curriculum cannot be accomplished without asking these questions: "how to teach the teachers?" (p. 33). Mestenhauser added that the development of internationally-oriented curriculum and pedagogy is central to the success of internationalizing education. "Internationalizing the curriculum incorporates content and pedagogy" (p. 33), and faculty members are critical contributors. Engaging the faculty is essential in internationalizing curriculum: "faculty and staff are responsible for creating and delivering the curriculum; creating new knowledge; and delivering outreach and development programs to the community and the world" (p. 33).

To conclude, this section suggests that internationalization within the curriculum is essential for future productivity. Based on the literature review, this study identified the development of internationally-oriented curriculum and faculty involvement in internationalizing content as the key components for institutions of higher education to internationalize education. The following section continues with a discussion of internationalization of higher education and how this promotes global integration.

Internationalization of Higher Education and Global Integration

The higher education sector can choose to merge to increase the number of students in the overwhelming majority of countries in the world with their increased mobility (Lehtomaki, Moaste, & Posti-Ahokas, 2016). The reason behind this is the characteristic effects of

globalization and other major economic and political common terrestrial processes (Lehtomaki et al., 2016). The scientific treatment in describing such phenomena involving many states and even larger number of universities gradually approved terms (Parkes & Griffiths, 2008). For the education system, the term "internationalization" is used in the world of theory and practice to cover the various changes and innovations in the educational systems of all countries (Knight, 2015). According to Parkes and Griffiths (2008), internationalization is always the cause of teachers' interactions and scientists and decision makers' different states in the vast field of training, education, and training.

This term is still little used, despite quite a noticeable spread of comparative educational research in the modern world (Tran et al., 2016). The lack of attention to international education events and innovative trends was because educationists were unable to examine them (Tran et al., 2016). During the past decades, the state policy of forced isolation and self-sufficiency was the main reason for the concentration on internal events, with publication restrictions on educational developments in other countries (Tran et al., 2016). But the greatest loss that resulted from isolationism was the educational and cultural exchanges and personal interactions of leaders in the field (Tran et al., 2016).

It is not surprising that the educational leadership teams of universities have international contacts and have even established their position regarding comparative characteristics with foreign counterparts (Qureshi et al., 2014). They have become real new challengers, where it was once impossible to rely on traditional education (Hawawini, 2016). Significant progress in the study of phenomena in internationalized education emphasizes the existence of many factors of both global and national origin, enforcing leading universities to implement those or other changes (Camarota, 2007; Hawawini, 2016). These external factors are primarily related to the

regional political associations of the countries with the most common labor market characteristics and free exchange of labor (Hawawini, 2016). One positive impact on the university system was the deepening international interdependence and active competition in the trade and labor markets, reducing barriers at borders and strengthening movement of scientists from one country to another (Hammond, 2016).

A consensus has emerged on the overall trends of changes in higher education internationalization, with aspects of development in the completion and the formation of the global education market (Altbach & De Wit, 2015). In the global education market, the leading nations of the world will increase income from the education of young people from developing countries (Altbach & De Wit, 2015). The educational process taking place under the pressure of external influences of globalization can be called the internationalization of the curriculum (Altbach & De Wit, 2015). The internationalization of curriculum content occurs by modernizing traditional disciplines and topics of international comparisons (Rumbley & Altbach, 2016). Curricula is being developed in foreign languages, focused on intercultural communication and multicultural youth with knowledge and skills (Rumbley & Altbach, 2016). Educational institutions plan to consolidate or put out dual diplomas recognized in two or more countries (Rumbley & Altbach, 2016).

Internationalization of higher education institutions is an essential task, with some of the most striking realities shaping North America being changing demographics, the growth in the global economy, and the introduction of technologies that allow for wide sharing of information (Ozturgut et al., 2014). Ozturgut et al. (2014) studied the best practices of effective strategies in the internationalization of higher education institutions and their curriculum.

Ozturgut et al.'s (2014) qualitative study investigated the existing outlook of internationalization in higher education in North American universities that had a sizable international student population attending their campuses. The purpose of the research was to explore the common practices for internationalization of higher education in North American institutions. Ozturgut et al. (2014) utilized Zha's (2003) conceptual and organizational framework of internationalization of higher education:

the activity approach, which includes curricula, studying abroad, internationalizing faculty and recruitment of international students. Other components of the framework include: the competency approach, which includes development of knowledge and skills, the ethos approach which focuses on the infusion of intercultural and international initiatives, and the process approach which seeks internationalization by means of inclusion of international and intercultural dimensions into teaching, service and research. (p. 29)

A correlation was discovered between the cited literature and raw data that was analyzed (Ozturgut et al., 2014). The main themes indicating current practices that higher education institutions were employing to increase internationalization were: 1) hosting international events for training and education on culture and diversity, and 2) having international dimensions within their institutional infrastructure (Ozturgut et al., 2014). Finally, it was suggested that internationalization of higher education in the United States needs to continue, evolve, and expand, particularly as globalization trends make it more pertinent to the understanding of various cultures (Ozturgut et al., 2014). For higher education in the United States to be competitive and viable in the global market, there needs to be a sustained goal in internationalizing teaching, and learning practices (Ozturgut et al., 2014).

One modern trend is that the most prudent and proactive universities in the developed countries account for the formation of an open world market of skilled labor and respond by changing their curriculum (Kennedy et al., 2015). Most often, they are introducing new disciplines and modernizing the old content so that their graduates more successfully fulfill their function (Kennedy et al., 2015). There is considerable geographical differentiation in risk assessments and the negative consequences of the process of internationalization of higher education (Killick, 2008). Almost all the countries of Latin and South America, where the sector has a strong position in state higher education, have also been shown to be at risk, and therefore their internationalization processes have been hindered (Berry & Taylor, 2014). Regarding the possible benefits of internationalization, higher education evaluation and position were unanimously agreed on (Berry & Taylor, 2014). Among the most important benefits of higher education internationalization, respondents identified the orientation of faculty and students in world-class education and the high professional level of teachers (Berry & Taylor, 2014). The motive of increasing the revenue of universities was seen as less important (Camarota, 2007). This is partly explained by the prevalence of respondents from developing countries (Berry & Taylor, 2014).

Regarding the internationalization of curriculum and research, most students still showed a deficiency in recognizing the importance of international skills and competencies to student learning (Ahwireng, 2016). To address this, Ahwireng (2016) argued that these deficiencies could be addressed by engaging university faculties in internationalization through programs abroad, accreditation, international roles, and informal and formal international relationships. It was also found that the students and faculties who have undergone such measures benefited from the acquisition of bilingual skills or multilingual abilities, firsthand cultural knowledge, global

knowledge, understanding of cultural nuances, personal growth and a higher tendency to develop sympathy (Ahwireng, 2016). In addition, Bikos, DePaul Chism, Forman, and King (2013) found that the current efforts to institutionalize internationalization of undergraduate curriculum involved establishing the curriculum, anticipating of student outcomes, improving instructional strategies, determining obstacles, and pushing for university structural development. These studies showed that such positive educational, personal, and institutional outcomes serve as motivation for faculties and students to engage in activities that promote the internationalization of curriculum and research.

To conclude this section, there is a necessity for internationalization to be a core element in teacher education, as these individuals are deemed most responsible for the transfer of knowledge to young generations. This transfer also has a significant potential influence over social issues that are presenting themselves in most countries. The following section continues with this theme with a specific look at higher education facilities and their relationship with internationalization.

Higher Education and Internationalization

As the world changes, so too do institutions of higher education (Streitwieser, 2014). Although the role of higher education has historically remained steadfast in its purpose of serving the public good, the delivery of service continues to be mediated by global economic, political, and cultural forces (Gacel-Avila & Marmolejo, 2016). The mediation of global networks has resulted in the emergence of a single world community through advanced communication technologies, an increase in the international mobility of labor, more emphasis on market economy and trade liberalization, increased activity levels of private investment, a

decrease in public support for education and the persistence of lifelong learning (Lumby & Foskett, 2016).

This world community has introduced new opportunities and threats of competition, assessment, and accountability for higher education as they respond to influences beyond campus and national borders (Cots, Llurada, & Garrett, 2014). Global market competition continues to influence societal change, giving transparency to global conditions as local concerns and local actions having global repercussions (Cots et al., 2014). This fusion of local and global activity alters the landscape of the university as an institution, transforming the campus infrastructure, academic functions and credentialing (Lepori, Seeber, & Bonaccorsi, 2015; Schneider & Burn, 1999). Failure to respond to this changing landscape risks relevancy should institutions of higher education disconnect from economic and societal trends (Ilieva, Beck, & Waterstone, 2014). Given the relentless economic, political, and cultural forces of the global marketplace, the critical question is not whether but how higher education should respond to this new global reality (Ilieva et al., 2014).

Globalization and internationalization exist in a state of mutual exchange with both creating challenging implications for institutions of higher education (Seeber et al., 2016). They are closely related and often used interchangeably but are neither synonymous nor mutually exclusive (Seeber et al., 2016). Globalization has strong economic and political undercurrents, and is often associated with competitive markets, transnational education, commercial knowledge-transfer, and is unassuming of national borders (Hazelkorn, 2015). It has been described in terms of a compression of time and space and as being associated with an ideological dimension that privileges market approaches to public policy-making (Hazelkorn,

2015). This economic ideological approach to public policy has implications for higher education (Mok & Cheung, 2011).

Mok and Cheung (2011) argue that markets are not sufficient for the challenges of the 21st century if solving problems of security, equity, and sustainability are a common goal. The challenges facing higher education extend beyond the international education networks and a one-way flow of student mobility to the harsh realities of internationalization (Kosmutzky & Putty, 2016). In the context of higher education, the term internationalization is increasingly used to discuss the international dimension of higher education (Kozmutzky & Putty, 2016). It has been defined as the process of integrating an international perspective into the teaching/learning, research and service functions of a higher education institution, often supported or framed by multilateral agreements or programs, to expand their reach over national borders (Parkes & Griffiths, 2008).

Internationalization is, among other things, guided by contradictory ideologies and entangled with pragmatic and commercial ideological motives of the cultural players within academe (Earls, 2016). The terms associated with international education both in theory and practice include several qualifiers including regions, skills and competencies, process, and context, leaving considerable room for multiple interpretations to an already-variegated concept (Earls, 2016). Multiple interpretations of internationalization manifest ideological and pragmatic motivations on whether or not to engage in internationalization (Knight, 2014). The rationale for higher education to engage in internationalization is rooted in the nature of higher education as a place where knowledge is freely produced and disseminated for broadly-defined social purposes (Camarota, 2007).

Human knowledge is based on common bonds of humanity, and, as such, is arguably a global enterprise (Bedenlier, Kondakci & Zawacki-Richter, 2017). Information and knowledge production seamlessly penetrate national borders, lending a natural quality of higher education to internationalization (Bedenlier et al., 2017). From the inception of academe, universities represented the international dimension functioning in common languages to serve international scholars (Warwick, 2014). Although internationalization has a long history in higher education, growing external pressure has introduced new opportunities and dimensions of competition, assessment and accountability (Mok & Cheung, 2011). Thus, in the process of contemporary internationalization, universities are purposefully engaged in internationalizing the curriculum, recruiting international students, providing study-abroad opportunities for domestic students, supporting faculty mobility initiatives, initiating offshore programming and a myriad of international partnerships, and creating networks to support collaborative research. While many institutions fail to incorporate internationalization into formal institutional assessment systems, these new dimensions, nevertheless, hold the capacity to advance internationalization efforts in higher education (Quezada, 2010; Warwick, 2014).

Universities are, therefore, by nature of their commitment to advancing human knowledge, international institutions (Clifford & Montgomery, 2014). As international institutions, universities engage in international cooperation and play a leading role in the exchange of cultures, languages and ideas in academic training world-wide (Clifford & Montgomery, 2014). This engagement with internationalization emphasizes the importance of creating a culture that values intercultural perspectives and communicates an understanding for the relativity of cultural beliefs, values, living patterns and ideas (Gao, Baik, & Arkoudis, 2015). The benefits of cultural diversity for students and staff, the opportunities to foster research

relationships across national boundaries, the increased knowledge base and the mere breaking down of national myopia are all worthwhile outcomes that are possible through internationalization (Pucciarelli & Kaplan, 2016). Many traditional non-profit universities engage in internationalization to enhance research and knowledge capacity and to increase cultural understanding (Parkes & Griffiths, 2008). Many universities are located in countries where governments cut public funding and encouraged international ventures, for example, Australia and the United Kingdom (Hartmann, 2014). Many of these initiatives have idealistic and implicit tendencies to focus on developing and middle-income countries (Hartmann, 2014).

The idealistic and implicit tendencies to do well can often shade a critical view of internationalization (Hartmann, 2014). There appears to be a prevalence of taken-for-granted assumptions about the inherent goodness of internationalization of the curriculum, but as with all educational policy and practice, there is a need for critical analysis, with questions such as whose knowledge, for what purposes, and benefiting whom (Killick, 2014). The idealistic rationale to internationalize higher education is often tempered, however, by structural, cultural and budgetary constraints (Killick, 2014). Internationalization can lead to a homogenized curriculum, standardization of assessments, and generally, an overregulated academic work environment (Killick, 2014). Homogenization of curriculum is of great concern, as it threatens to minimize standards, codify mass education programs, and diminish the autonomy of the professional role (Stromquist & Monkman, 2014).

Scientific management, with its emphasis on efficiencies, predictability, and control of education, has implications for academic autonomy and subsequent demoralizing of the academic profession (Ramos, 2014). The rise of managerial ideology and the increased power of university managers further produces an alienated and demoralized academic workforce and a

climate of resentment and resistance even among those academics who have become academic managers and who have benefited from managerialist policies (Parkes & Griffiths, 2008). A threat to the preservation of the role of the professional and the delivery of a quality education manifest as resistors to internationalization (Block, 2016). Further reluctance to engage in international activities stems from limited resources in support of internationalization (Block, 2016).

Higher education faces contradictory tendencies in delivering educational services in the new world community and limited resources further challenge the engagement in, and facilitation of, international activities. Limited resources, and an inherent commitment to the local community, further direct the research, teaching, and service activity of faculty members to the local community (Block, 2016).

Conclusion

To conclude this chapter, although this dissertation has a chosen definition of internationalization, there are still drastic limitations in the studying and measuring of internationalization. Therefore, this study will be one of the first to compare two global cities in the extent of the internationalization within higher education institutions. This is a significant study, as recent developments in the understanding of internationalization have shed light on its importance for the leaders of the future, as well as those students graduating from the world's leading universities. Internationalization has inspired the reshaping of international curriculum, as well as some national curriculum, of all which has transpired through the new ease of mobility around the world. The data uncovered in this literature review have led to the chosen research purpose, questions, and design of the study, all of which will be further discussed in the following chapter.

CHAPTER 3: METHODOLOGY

Overview

This chapter describes the conceptual framework for the study, the overall design and setting in which the study took place, the population and sample, data sources and data collection techniques. It also discusses the instrumentation and data analysis strategies employed to answer the study's guiding questions.

Conceptual Framework

This study conceptualizes faculty development of professional networks and the integration of international content into the curriculum as a series of behavioral choices that are shaped by demographics, career characteristics, and self-knowledge. The conceptual framework for this study derives from the Blackburn and Lawrence model rooted in motivation theory (Blackburn & Lawrence, 1995).

Blackburn and Lawrence developed a theoretical model to explain how faculty members behave based on the assumption that individual and environment factors interact in complex ways to shape behavior. They examine whether the inclusion of *self-knowledge* (beliefs about their own knowledge and self-efficacy) and *social knowledge* (beliefs about the expectations of their institution and department) variables make a notable improvement over socio-demographics (age, gender) and career variables (rank, disciplines) in explaining faculty behavior in the areas of teaching, research, and scholarship. Their model includes socio-demographic characteristics such as age, gender, and ethnicity and career variables describing the career path, such as academic discipline, type of academic institution, past and present positions, and career age. Blackburn and Lawrence also added their own unique group of variables, self-knowledge and social knowledge, stressing cognition as the mediator of the interaction process between the

individual and the environment. The area of self-knowledge contains self-perceived beliefs, attitudes, and values, such as one's ability as a researcher and one's level of ambition and persistence. Social knowledge indicates how the faculty member perceives the environment such as what is valued by university administrators and the support of colleagues for research (Blackburn & Lawrence, 1995).

Blackburn and Lawrence also looked at environmental conditions, environmental responses and social contingencies. Environmental conditions represent the structural and normative features of the university or college such as the fiscal well-being, geographical location, systems of faculty governance, the composition of a department's faculty, composition of the students, and the quality of the library, laboratories, and other institutional resources. In addition, environmental conditions consist of normative features such as the understanding of the university or college mission shared by faculty and administrators. Environmental response includes the formal feedback faculty receive for their performance such as tenure and evaluations from students or from peers who review their publications. Lastly, social contingences include events that happen in faculty members' personal lives that affect their work such as the birth of a child or health problems of a spouse or parents (Blackburn & Lawrence, 1995).

For this study, a conceptual framework similar to Blackburn and Lawrence's was used to test how demographics, career characteristics, and self-knowledge shape the integration of international content into the curriculum and faculty development of professional networks.

The framework is depicted in Figure 3.1.

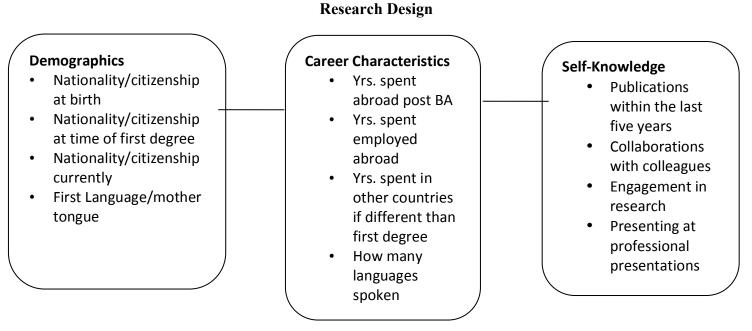


Figure 3.1. Conceptual framework.

The research plan for this study builds upon the approaches used in previous studies on internationalizing the undergraduate curriculum (Schneider & Burn, 1999; Schneider, 2003). This study employed a quantitative method design to determine the degree of internationalization of each sub sample: HK and NYC. Quantitative data was gathered from the use of a survey of teacher education faculty at each of the two sites: HK and NYC.

Research Participants

This study focuses on the cases of two universities, one in New York and one in Hong Kong. Hong Kong University and Queens College in New York were selected based on their mission to prepare students for a global society, average size of institution, number of full-time faculty and proportion of students born overseas.

Queens College (QC) is located in Flushing, New York, and is one of the most culturally diverse colleges in the City University of New York (CUNY) system. Queens College currently

enrolls 16,059 undergraduate and 4,652 graduate students with more than half of the students born overseas in over 150 countries and speaking more than sixty-six languages (Queens College, 2018). The student population at Queens College is very diverse with 26.8% Asian, 18.9% Hispanic, 8.8% Black, and 45.3% White students. Queens College employs 636 full-time and 765 part-time faculty and it takes pride in having a faculty and student population that reflects the diversity of New York City. The overall mission of Queens College is to prepare its students to become leaders in a global society by offering rigorous education in the liberal arts and sciences under the guidance of faculty dedicated to teaching and research. The School of Education at Queens College strives to train "future teachers, with particular emphasis on those who will work in diverse urban communities" (Queens College, 2018).

Hong Kong University (HKU) is located in Pokfulam, Hong Kong, and it enrolls 22,260 students with 6,388 international students, not including those from Mainland China. The student body at Hong Kong University comprises 66.6% from Mainland China including Hong Kong, 11.2% other Asian countries, 2.7% Australian and New Zealand, 11% European countries, and 7.8% North American countries. Hong Kong University employees 563 full-time faculty and 421 part-time faculty. In addition, HKU employs 227 research faculty. HKU faculty is diverse with 29.4% from Mainland China, 11.9% from other Asian countries, 9.9% from Australia and New Zealand, 23.4% from European countries, and 25% from North American countries.

HKU strives to heighten students' awareness of their own culture and other cultures, develop cultural sensitivity and interpersonal skills for engagement with people of diverse cultures, and perform social responsibilities as a member of the global community (HKU, 2018). HKU offers seven undergraduate degrees in education, including its new double degree, Bachelor of Education and Bachelor of Social Sciences. While the School of Education was not

established until 1976, the training of teachers at Hong Kong University has taken place for over 90 years through the Faculty of Arts. The School of Education trains teachers and engages them in multiple partnerships within Hong Kong, mainland China, and internationally. Hong Kong University is also taking part in a major reform. The government of the SAR of Hong Kong authorized a major reform of its universities in 2004. This reform will move the eight universities into a four-year undergraduate degree program to include a considerable component of non-specialized or general education moving away from its British-based three-year baccalaureate program. The eight universities in Hong Kong have been preparing for the transition to be implemented since 2012.

Queens College Division of Education has three departments: Education and Community Programs, Elementary and Early Childhood Education and Secondary Education and Youth Services. QC offers ten undergraduate programs, 15 graduate programs, 16 post undergraduate and six postgraduate certificate programs. The three combined departments employ 79 faculty and enroll 4,808 students.

Hong Kong University Education offers seven undergraduate and nine graduate programs. HKU employs 89 faculty and enrolls 2,392 students.

Data Sources

The data source used for this study was a paper and pencil survey (Appendix A). The survey questions for this study build upon the surveys used in previous studies of internationalization (Schneider, 2003; Cummings & Finkelstein, 2011). Questions 1 to 4 are from the Changing Academic Profession(CAP) Survey by Cummings & Finkelstein (2011) and are demographic questions to provide faculty profiles. Questions 5 to 22 are 'yes' or 'no' questions derived from the Schneider survey on internationalizing the undergraduate training of

secondary school teachers (Schneider, 1999) and were designed to link the survey questions to key determinants of internationalization adopted for this study, i.e., socialization and career characteristics.

Data Collection

The data was collected in three steps. First, following approval by IRB, surveys were mailed to all full time teacher education faculty in both institutions. Queens College has 79 full-time faculty members in the teacher education program (Queens College, 2018) and Hong Kong University has 89 (HKU, 2018). Surveys were returned to me via postal service mail. A data sheet was designed to keep track of returned surveys. The data sheet listed the surveys returned as undeliverable, HKU or QC anonymous returns.

The Dependent Variables: Dimensions of Faculty Internationalization

For this study, the key outcome indicators were derived from the definition of internationalization as "the process of integrating an international, intercultural, or global dimension into the purpose, functions, or delivery of post secondary education" (Knight, 2004, p. 7). This definition recognizes that internationalization of the curriculum is an ongoing process, which is fundamental to the success of institutions' graduates and to the future of institutions of higher education. It further acknowledges that the success of the internationalization process is dependent on the participation of all academic and professional staff, regardless of their roles or responsibilities and relies on the development of cultural intelligence and communication competencies in order to foster these attributes in students.

The *integration* of international content into the curriculum and professional networks was conceptualized as the inclusion of topics related to international political systems, national security, public health, economic systems/international trade, global governance, education in

different nations and discussion of ways in which people of different cultures interpret their own life experiences and those of others (Qiang, 2003; Odgers & Grioux 2006; Khalideen, 2006). The analysis of these documents was coded by presence or absence of each of the indicators mentioned above as a "1" or "0" and adding up all the "1" for each faculty to construct an index of three dimensions of internationalization. These included:

- a. integration of international content;
- b. integration of international student networking opportunities; and
- c. faculty research and professional networks abroad.

Integration of international content into the curriculum was also indicated by faculty teaching and included assigned readings, course illustrations, faculty experiences from working in other nations, and the use of technology for international collaborations. The internationalization of the curriculum puts faculty as the link between curriculum and the students; therefore, faculty members' international experience is important. Development of international professional networks was measured by faculty international experiences including joint research, joint presentations, joint publications with foreign scholars, and research abroad. These outcomes were measured by looking at the indicators listed in Table 3.1.

Table 3.1 *Indicators of Internationalization*

	Indicators (survey are yes-no answers)	Source
Demographics	Nationality/Citizenship at birth; time of first degree; currently	Survey 1
	First language/mother tongue	Survey 2
	Languages spoken	Survey 3

	Years in country of 1 st degree; country employed if different from 1 st degree and other countries	Survey 4
Integration of international content into the curriculum and international student networking opportunities	During current or previous academic year, taught courses abroad	Survey 5
	Course includes (or not) non-US comparative or global issues research materials (case studies, journals, articles and/or newspapers clippings) about other countries' educational systems	Survey 6
	Course uses technology for communications/collaborations with faculty and students from other countries	Survey 7
	Course includes option of study abroad as part of the course requirement	Survey 8
	Course includes option of practice teaching abroad for preservice candidates	Survey 9
	Course includes option of overseas experiences with faculty	Survey 10
	Course has a pre-requisite of a foreign language	Survey 11
	Course has option of international student serving as cultural resource for courses or related services	Survey 12
	Course includes discussion on education pedagogy and best practices in other countries	Survey 13

	Course offers the pre-service candidate the option of practice teaching in a bilingual or magnet school	Survey 14
	Teach a special topic course with internationalization as the focus	Survey 15
	Teach in English only language	Survey 16
Faculty research and professional networks abroad	Publication in non- native language or not in English	Survey 17
	Research international in scope or orientation	Survey 18
	Professional presentations at conferences; joint presentations with international colleagues	Survey 19
	Collaboration with international colleagues	Survey 20
	Co-authored with international colleagues	Survey 21
	Published in a foreign country	Survey 22

The Independent Variables: Determinants of Faculty Internationalization

In line with the definition of internationalization and the conceptual framework introduced earlier, independent variables for this study were identified that operationalized the three categories or clusters of predictors: demographics, career characteristics and self-

knowledge to predict faculty development of professional networks and the integration of international content into the curriculum. Table 3.2 lists these variables.

Table 3.2

Independent Variables

Independent Variable	Source
Demographics:	
Citizenship at Birth: US or HK/China?	Survey
Citizenship at Time of 1 st Degree: US or HK/China?	Survey
Citizenship Currently: US or HK/China?	Survey
Mother Tongue: English or Chinese?	Survey
Self Knowledge (yes/no response)	
Do you engage in research?	Survey
Do you present at professional presentations?	Survey
Collaborating with colleagues	Survey
Publications within the last five years	Survey
Career Characteristics	
How many languages have you taught in? 1,2 or 3?	Survey
Number of Years since Award of 1 st Degree spent in	Survey
country of 1 st Degree:	
Month or less	
1 to 5 years	
5 to 10 years	
10 to 15 years	
15 or more	
Number of Years since Award 1 st Degree spent in Country	Survey
Employed if Different from 1 st Degree:	
Month or less	
1 to 5 years	
5 to 10 years	
10 to 15 years	
15 or more	
Number Years since Awarded 1 st Degree spent in other	Survey
and current Employment:	
Month or less	
1 to 5 years	
5 to 10 years	
10 to 15 years	
15 or more	

Data Analysis

The statistical software for social sciences (SPSS) version 20.0 was used for the analysis of the proposed research questions:

- (1) How do teacher education faculty at the two case sites differ in terms of the extent and patterns of the internationalization as reflected in the content of their courses and the composition of their professional networks?
- (2) What factors combine to explain both the extent and pattern of internationalization of course content and professional networks?

As stated by Creswell (2008), SPSS would carry out almost all the statistical analysis required at a professional level. Independent t test and logistic regression are conducted to examine the significance of the differences and relationship among the selected variables of this study.

The quantitative data analysis proceeded in stages. First, data reduction was undertaken by developing indexes for each of the three main outcome variables: integration of international content, integration of international student networking opportunities and faculty research and professional networks abroad. To reduce the number of indicators of integration of international content and faculty research and professional networks, three indexes of internationalization were created. These included:

- a. integration of international course content;
- b. integration of international student networking opportunities; and
- c. faculty research and professional networks abroad (Table 3.3).

The indexes were constructed by taking each item and using the median to dichotomize each respondent into either of two categories: high, i.e. above the median (1) or low, i.e. below

the median (0) for each item. Then the scores "1" were added to come up with an index across items

Table 3.3

Components of the Indexes of Three Determinants of Internationalization

Indexes of Integration of International Content Integration of **Integration of International Faculty Research and Student Networking International course Professional Networks Opportunities** content Abroad 0-50-6 0-6 Course includes options of **International Collaborations** Course includes non-US comparative or global practice teaching at bilingual issues research materials or magnet schools about other countries Course includes non-US Course includes options of Co-authored with comparative or global international students serving international colleagues issues research materials as cultural resources for about other countries courses or related activities education systems Teach in other languages Course includes options of Done joint presentations with international colleagues study abroad Published in a foreign country Course includes options of Course uses technology for communications/ foreign language requirement collaborations with faculty and students from other countries Publish in Different Teach special topic course Course includes options of with internationalization as overseas experience with Languages the focus faculty for students Course includes options of Research interest (present, practice teaching abroad for past or future) international in

Once having constructed indexes of the dependent variables and added such index scores to the data file, a second stage of the analysis explicitly sought to answer the research questions. The survey data was analyzed using descriptive statistics to explore the relationships between variables, including bivariate contingency analysis when measures were categorical in nature and measure of central tendency when measures were ordinal for each subsample, to determine the

scope or orientation

pre-service candidates

magnitude and patterns of internationalization of course content and faculty professional networks for each subsample (Hong Kong University and Queens College). The data was analyzed to answer the following guiding research questions:

- (1) How do teacher education faculty at the two case sites differ in terms of the extent and patterns of internationalization as reflected in the content of their courses and the composition of their professional networks?
- (2) What factors combine to explain both the extent and pattern of internationalization of course content and professional networks?

The survey data from the two subsamples (HK and QC) were compared to explore the relationship between the demographics, career, and self-knowledge characteristics and the three index scores of each subsample: (1) integration of international course content, (2) integration of international student networking opportunities, and (3) faculty research and professional networks abroad (Table 3.3).

Limitations of Study

This study does not attempt to independently characterize the quality of a particular teacher education program in the two selected sites. It attempts to assess the extent to which, and the ways in which faculty at the two sites have sought to internationalize the preparation of their teaching force.

The sample for the quantitative data was smaller than anticipated with only a 40% response rate. This provides an analysis of the level of internationalization of less than half of the sampled group. In addition, the study did not consider teacher education disciplinary effects, for example, the difference between the math/sciences versus the social sciences. Lastly, the survey did not exclude the People Republic of China and Taiwan as foreign countries for Hong

Kong respondents. Therefore there is a slight possibility, that HKU faculty may have included PRC and Taiwan as international collaborators, artificially inflating HKU numbers.

Methodology Summary

In summary, this study seeks first to identify the level and patterns of integration of international content into the curriculum and faculty professional development networks for the two selected sites, HKU and QC. Lastly, it seeks to explain the magnitude and pattern of internationalization based on the Blackburn and Lawrence framework. In line with the definition of internationalization adopted for this study, the factors examined were demographics, career characteristics and self-knowledge.

This study employed a paper and pencil survey for data collection. The data was assessed for the intensity of internationalization with an emphasis on the variables listed in Table 3.1 and Table 3.2. Lastly, to reduce the long list of indicators of internationalization used for this study, three indexes of integration of internationalization were created as listed in Table 3.3 to serve as the three dimensions of the outcome variable. Findings in Chapter 4 will remained organized by question in an effort to keep the data focused on the research guiding questions.

CHAPTER 4: RESULTS AND FINDINGS

This chapter reports the results and findings of this study. First, a description of the sample will be provided, detailing measures of central tendency and variation for quantitative variables and frequencies and percentages for categorical variables. Second, the results of the statistical analysis will be provided followed by the interpretation of the results. Last, a summary of the results and findings will be provided.

Sample Characteristics Response Rate

The population for this study included Education faculty from two universities, one in New York and one in Hong Kong. The School of Education at Queens College (QC) has 79 full-time faculty members in the teacher education program (Queens College, 2018). Hong Kong University (HKU) School of Education has 89 full-time faculty members in the teacher education program (HKU, 2018). Of 168 surveys mailed out to the faculty, 13 were returned undeliverable by the postmaster and 68 (40 percent) were returned in usable form. Of the 68 surveys received, 37 (54 percent) were returned by HKU faculty and 31 (46 percent) were returned by QC faculty. The sample for this study consisted of 37 faculty members from Hong Kong University (HKU) and 31 faculty members from Queens College (QC). Table 4.1 presents the survey response rate for Hong Kong University (HKU) and Queens College (QC) survey respondents. This table presents the number of total questionnaires distributed for the survey and returned questionnaires. Table 4.1 presents the sample characteristics for each institution.

Table 4.1
Survey Response Rates

	Hong Kong	Queens College	ALL
	University	(QC)	
	(HKU)		
Total	89 (100.0)	79 (100.0)	168 (100.0)
Sent			
Total returned	37 (42.0)	31 (39.0)	68 (40.0)

Tables 4.2 to 4.4 show the demographic, career, and self characteristics of the respondents. Faculty at Hong Kong University and Queens College shared several demographic characteristics (Table 4.2), most notably the clear majority reporting their current citizenship as the same as at birth and at the time of receiving the first degree (90% of HKU faculty and 94% of QC faculty). Among QC faculty, the percentage speaking English as their first language parallels their citizenship (both at 94%) and among HKU faculty, 92% report speaking Chinese as their first language while 90% report Hong Kong or Chinese citizenship.

A difference is noted in the number of languages spoken at the present time by each group: 70% of HKU faculty speaks two languages and 30% speak three or more languages. This reflects the reality that in Hong Kong, there are two official languages, English and Chinese.

The QC group was much less likely to be multilingual: only 36% speak two languages and only 13% speak three or more.

Table 4.2 presents the findings of the survey respondents' citizenship, nationality, mother tongue, and language spoken.

Table 4.2

Distribution of Respondents by Citizenship/Nationality, Mother Tongue, and Language Spoken

	HKU N=37 % Reporting	QC N=31
Citizenship Now HK/China/US		
	90	94
Citizenship at birth HK/China/US	90	94
Citizenship at time of first degree HK/China/US	90	94
Language/mother tongue Chinese/English	92	94
Speak 2 languages	70	36

Career Characteristics of Survey Respondents

Faculty experiences through collaborations, research, teaching or working in other countries enrich the courses they teach when they return to their home institution. Therefore the time that faculty spend in other countries likely translates into enhanced opportunities of an international nature for the students they teach (Cogan, 1998; Odgers and Giroux, 2006; Killick, 2008). When comparing the HKU faculty to the QC faculty, the study found that both groups spent the largest amount of time in the country where they received their first degree. Nearly nine out of ten QC faculty spent 15 or more years employed in the same country as the first degree. The faculty at HKU, however, showed a significantly higher percentage of time employed in a country outside of the country of their first degree. The HKU group also spent

more time in other countries outside the country of their first degree and current employment compared to the QC group (see Table 4.3 and Appendix C).

Table 4.3

Mobility Since First Degree

	HKU N=37	QC N=31
	Respondents	
15 or more years spent in country of first degree (no-mobility)	28	27
15 or more years employed in country different from country of first degree (mobility)	28	7
1-5 years spent in countries other than country of first degree and country of employment (mobility)	15	5

Self Knowledge Characteristics of Survey Respondents

Faculty members' self-perception is a result of the interaction process between the individual and environment. Faculty beliefs about their own knowledge and self-efficacy have an effect on faculty abilities as researchers and their level of ambition and persistence (Blackburn & Lawrence, 1995). When comparing HKU faculty to QC faculty, a significantly higher percentage of HKU faculty than QC faculty reported that they perceive themselves as engaged in research, professional presentations, collaborations, and publishing. Table 4.4 provides a breakdown by percentages of the groups' self-knowledge. Forty-eight percent of individuals at HKU had publications within the last five years and 36% at QC had recent publications. Fifty three percent of teachers at HKU collaborated with colleagues whereas 24% of teachers at QC collaborated. Sixty four percent of teachers at HKU engaged in research and 32% at QC.

Table 4.4

Percent Reporting Various Research or Professional Characteristics Related to Self-Knowledge

	HKU N=37 % Reporting Yes	QC N=31
Publications within the last five years	48	36
Collaborating with colleagues	53	24
Engage in Research	64	32

Levels of Internationalization

Three internationalization dimensions were investigated in this study: integration of international content, integration of international student networking opportunities, and faculty research and professional networks. Integration of international content was measured by the course content, course topics and specialized courses with emphasis on the integration of politics, economic, and cultural/social context. The integration of international students' networking opportunities was measured by analysis of teaching practices including assigned readings, course illustrations, international students serving as cultural resources, sharing faculty experiences from working in other nations and the use of technology for international collaborations. Faculty research and professional networks was measured by faculty experiences including joint research, joint presentations, joint publications and research abroad. Integration of international content (M = 1.68, SD = 1.18) ranged from 0.00 to 4.22; integration of international students' network opportunities (M = 0.94, SD = 0.94) ranged from 0.00 to 4.00; and faculty

research and professional networks abroad (M = 4.78, SD = 2.09) ranged from 0.00 to 8.00. Both mean and median were close for each of the three variables indicating approximate normality in the respective distributions. Table 4.5 summarizes these results below.

Table 4.5

Descriptive Statistics for Index Scores of Dependent Variable

	N	Min	Max	Mean	Median	Std. Dev.
Integration of international Content	68	.00	4.00	1.68	1.50	1.18
Integration of students professional networks	68	.00	4.00	.94	1.00	.94
Faculty research and professional networks abroad	68	.00	8.00	4.78	5.00	2.09

Research Question 1

(1) How do teacher education faculty at the two case sites differ in terms of the extent and patterns of the internationalization as reflected in the content of their courses and the composition of their professional networks?

An independent t-test was conducted using SPSS to address this first research question. An independent t-test is used when a researcher wishes to determine if there is any statistically significant difference between the means of two independent groups. Descriptive statistics for the dependent variables are given in Table 4.6 below.

Table 4.6

Descriptive Statistics for Dependent Variables

	School	N	Mean	Std. Dev.
Integration of international content	HKU	37	1.22	.95
integration of international content	QC	31	2.22	1.20
Integration of intermetional students' network apportunities	HKU	37	.84	.80
Integration of international students' network opportunities	QC	31	1.06	1.09
Foculty research and respectively returnely should	HKU	37	6.14	1.29
Faculty research and professional networks abroad	QC	31	3.16	1.68

QC scored higher in integration of international content than HKU (QC: M = 2.22, SD = 1.20, HKU: M = 1.22, SD = 0.95). This difference was a significant mean difference of M = 1.00, t (66) = -3.872, p < .001. There were no significant mean differences in integration of international students' networking opportunities between QC (M = 1.06, SD = 1.09) and HKU (M = 0.84, SD = 0.80). There were significant mean differences in faculty research and professional networks abroad between QC (M = 3.16, SD = 1.68) and HKU (M = 6.14, SD = 1.29). HKU scores significantly higher than QC. This resulted in a significant mean difference of 2.97, t(66) = 2.225, p < .001. Table 4.7 below summarizes the results of the independent t tests. Table 4.7

Results of Independent t test for RQ 1

		Levene's T Equality of V	t-t	est for E	Equality of I	Means	
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference
Integration of international content	Equal variances assumed	2.925	.092	-3.872	66	.000	-1.00

	Equal variances not assumed			-3.791	56.529	.000	-1.00
Integration of international students' networking opportunities	Equal variances assumed	5.005	.029	986	66	.328	23
	Equal variances not assumed			959	53.896	.342	23
Faculty research and	Equal variances assumed	2.250	.138	8.254	66	.000	2.97
professional networks abroad	Equal variances not assumed			8.069	55.871	.000	2.97

Research Question Factors Shaping Internationalization

Next, the survey data was analyzed using inferential statistics (logistic regression) to explore the relationship between the demographics, career, and self-knowledge characteristics and the three index scores of each subsample: (1) integration of international course content; (2) integration of international students' networking opportunities; and (3) faculty research and professional networks abroad (Table 3.3). This analysis sought to address the following question of the study:

Research Question 2

(2) What factors combine to explain both the extent and pattern of internationalization of course content and professional networks?

The three dependent variables in this study had to be recoded as dichotomous variables for logistic regression. Integration of international content was recoded as either 0 (below a median value of 1.5) or 1 (above the median value). Integration of international students' networking opportunities was recoded as 0 (below the median value of 1.0) or 1 (above the median). Last, faculty research and professional networks abroad was recoded as either 0 (below a median value of 5.0) or 1 (above the median).

The independent variables within the models were school (QC or HKU), country at birth, the country presently teaching in, and number of years teaching abroad. Three separate logistic regressions were performed, one for each of the three dependent variables. The results now follow.

Integration of International Content

Logistic regression was performed to assess the combined effect of the factors of school (QC or HKU), country at birth, the country presently teaching in, and number of years teaching abroad on the integration of international content. The overall model was statistically significant, $\chi^2(9) = 25.422$, p = .003. The base model (the model with no predictor variables) was able to predict with 50% accuracy the correct classification of integration of international content by assuming all outcomes were categorized as 1, meaning high integration of international content. With the addition of the predictor variables, the model increased its accuracy to 75.0%. Although these predictor variables did add to the model's predictability, none of the variables were significant at the 5 % level. School had the lowest p-value: p = 0.095. The U.S. served as the reference category for the variable country at birth and QC was the reference category for the variable school. Neither country of birth or country currently teaching in were statistically significant: p > .05. Number of years teaching abroad was not significant: p = 0.570. Tables 4.8 and 4.9 depict the results.

Table 4.8

Omnibus Tests of Model Coefficients

	Chi-square	df	Sig.
Step	25.433	9	.003
Block	25.433	9	.003
Model	25.433	9	.003

Table 4.9

Variables in the Equation

	В	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
School(1)	-1.810	1.085	2.784	1	.095	.164	.020	1.372
CNBirth			4.020	2	.134			
CNBirth(1)	-1.310	1.242	1.111	1	.292	.270	.024	3.081
CNBirth(2)	.663	1.220	.295	1	.587	1.940	.177	21.212
TeachAbroad	.533	.938	.323	1	.570	1.704	.271	10.705
Constant	1.095	.497	4.857	1	.028	2.988		

Integration of International Students' Networking Opportunities

Logistic regression was performed to assess the combined effect of the factors of school (QC or HKU), country at birth, the country presently teaching in, and number of years teaching abroad on integration of international students' networking opportunities.

The overall model was not statistically significant, $\chi 2(4) = 6.667$ p = .155. The base model (the model with no predictor variables) was able to predict with 63.5% accuracy the correct classification of integration of international students' networking opportunities by assuming all outcomes were categorized as 1, meaning high integration of international students' networking opportunities. With the addition of the predictor variables, the model increased its accuracy to only 65.1%. The predictor variables did not add to the model's predictability; none of the variables were significant at the 5% level. School had the lowest p-value p = 0.069. The US served as the reference category for the variable country at birth and QC was the reference category for the variable school. Neither country of birth nor country currently teaching in were

statistically significant: p > .05. Number of years teaching abroad was not significant: p = 0.638. Tables 4.10 and 4.11 depict the results.

Table 4.10

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
	Step	6.667	4	.155
Step 1	Block	6.667	4	.155
	Model	6.667	4	.155

Table 4.11

Variables in the Equation

	В	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
School(1)	-1.954	1.075	3.302	1	.069	.142	.017	1.166
CNBirth			.676	2	.713			
CNBirth(1)	.555	1.117	.247	1	.619	1.742	.195	15.541
CNBirth(2)	.972	1.208	.648	1	.421	2.644	.248	28.236
TeachAbroad	.425	.903	.222	1	.638	1.530	.261	8.975
Constant	1.347	.526	6.556	1	.010	3.845		

Faculty Research and Professional Networks Abroad

Logistic regression was performed to assess the combined effect of the factors of school (QC or HKU), country at birth, the country presently teaching in, and number of years teaching abroad on faculty research and professional networks abroad.

The overall model was statistically significant: $\chi 2(4) = 38.175$, p < 001. The base model (the model with no predictor variables) was able to predict with 57.1% accuracy the correct

classification of faculty research and professional networks abroad by assuming all outcomes were categorized as 1, meaning high faculty research and professional networks abroad. With the addition of the predictor variables, the model increased its accuracy to 82.5%. The predictor variables added to the model's predictability with two of the variables significant at the 5% level. School was statistically significant: p < 0.001 with an odds ratio of EXP(B) = 859.101. Compared to QC, HKU was 859 times more likely to exhibit high faculty research and professional networks abroad. Country of birth was also found to be statistically significant. Specifically, compared to the U.S., Hong Kong was less likely to score faculty research and professional networks abroad than the U.S: p = .036, EXP(B) = .036. In other words, the U.S was 1/.036 = 500 times more likely to exhibit high faculty research and professional networks abroad than Hong Kong. Number of years teaching abroad was not significant: p = 0.257. Tables 4.12 and 4.13 depict the results.

Table 4.12

Omnibus Tests of Model Coefficients

	Chi-square	df	Sig.
Step	38.175	4	.000
Block	38.175	4	.000
Model	38.175	4	.000

Table 4.13

Variables in the Equation

	В	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
School(1)	6.756	1.878	12.942	1	.000	859.101	21.653	34085.318
CNBirth			4.207	2	.122			
CNBirth(1)	-3.311	1.628	4.137	1	.042	.036	.002	.887

CNBirth(2)	-2.723	1.686	2.609	1	.106	.066	.002	1.788
TeachAbroad	-1.434	1.265	1.284	1	.257	.238	.020	2.847
Constant	-3.020	1.027	8.648	1	.003	.049		

Summary of Findings

An independent t-test was conducted in to address this first research question, "How do teacher education faculty at the two case sites differ in terms of the extent and patterns of the internationalization as reflected in the content of their courses and the composition of their professional networks?" QC scored significantly higher in integration of international content than HKU. There were no significant mean differences in integration of international students' networking opportunities between QC and HKU. There were significant mean differences in faculty research and professional networks abroad between QC. HKU scores significantly higher than QC.

Logistic regression was performed to address the second research question, "What factors combine to explain both the extent and pattern of internationalization of course content and professional networks?" Logistic regression was performed to assess the combined effect of the factors of school (QC or HKU), country at birth, the country presently teaching in, and number of years teaching abroad on integration of international content. None of the variables were significant at the 5% level.

Logistic regression was performed to assess the combined effect of the factors of school (QC or HKU), country at birth, the country presently teaching in, and number of years teaching abroad on integration of international students' networking opportunities. School had the lowest p-value: p = 0.069. The US served as the reference category for the variable country at birth and QC was the reference category for the variable school. Neither country of birth nor country

currently teaching in were statistically significant. Number of years teaching abroad was not significant.

Logistic regression was performed to assess the combined effect of the factors of school (QC or HKU), country at birth, the country presently teaching in, and number of years teaching abroad on faculty research and professional networks abroad. The predictor variables added to the model's predictability with two of the variables significant at the 5% level. School was statistically significant, with an odds ratio of EXP(B) = 859.101. Compared to QC, HKU was 859 times more likely to exhibit high on faculty and professional networks abroad. Country of birth was also found to be statistically significant. Specifically, compared to the U.S., Hong Kong was less likely to score high on faculty research and professional networks abroad than the U.S. Number of years teaching abroad was not significant.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

This chapter includes the discussion of the results of the analyses in light of the current body of literature. First, a summary of the background and overview of the study is included. Then, the major findings are explained and located within the context of the current study and the literature. Implications and limitations are also discussed. Finally, recommendations for future studies are enumerated

Overview of the Study

Schools need to prepare young people for a more globalized society. This calls for teachers and prospective teachers with skills and knowledge to address the changes that come with a more global society. Teacher education programs must be responsible for providing preservice candidates with the knowledge and experience necessary to infuse global knowledge in their K-12 classrooms. Bikos et al. (2013) identified the internationalization of teacher education programs as not just a formality, but rather a basic and necessary component for successful teacher training. Teacher education faculty must be prepared to teach more than just pedagogical and subject area content knowledge. Faculty must have a strong understanding of global issues and still have the skills to design lessons that assist their students in learning the content, skills, and values of instruction. Faculty needs to teach the international content along with best practices.

Restating Research Problem

The American Council of Education (ACE 199) stated that there is a need for a new generation of teacher education faculty that can contribute to the newly globalized academic profession and that this is a vital source for national economic growth in a global economy. Yet teacher education programs still face challenges in internationalizing their education structure.

The following research question guided the study:

- (1) How do teacher education faculty at the two case sites differ in terms of the extent and patterns of the internationalization as reflected in the content of their courses and the composition of their professional networks?
- (2) What factors combine to explain both the extent and pattern of internationalization of course content and professional networks?

It has been concluded from this study that internationalization of teacher education programs is necessary to remain competitive in this global economy. The medium of English has been recognized as the language of education in globally respected universities and in Hong Kong due to the educational system reforms making it a likeable place for study. The importance of internationalization has been emphasized by the officials of the Hong Kong educational system. Efforts are being made to attract international students by making the visa and enrollment restrictions flexible. According to this study, the universities in Hong Kong have a good opportunity to make their teacher education programs competitive and recognized for their emphasis on internationalization.

Overview of Research Methodology

For this study, a similar conceptual framework to Blackburn and Lawrence was used to determine how demographics, career characteristics, and self-knowledge shape the integration of international content into the curriculum and faculty development of professional networks. This study employed a quantitative method design to determine the degree of internationalization of each sample: HK and NYC. Quantitative data was gathered from the use of a survey of teacher education faculty at each of the two sites: HK and NYC. This study focuses on the cases of two universities, one in New York and one in Hong Kong. Hong Kong University and Queens

College in New York were selected based on their mission to prepare students for a global society, average size of institution, number of full-time faculty and proportion of students born overseas.

Major Findings of the Research

Results of the present study demonstrated the relationship of teacher education facility in different cities. In addition, the outcomes showed the predictive role of factors such as setting and demographic and professional characteristics in the extent of internationalization of curricular content and professional networks. Using Blackburn and Lawrence's (1995) theoretical framework on the behaviors relating to environmental factors among faculty members, this present study highlighted the importance of internationalization of content of teachers.

The results showed that Hong Kong faculty realized the importance of the internationalization of the teacher education programs in the contemporary world to compete in a globalized world. This demonstrates how Hong Kong University tends to adopt a more globalized curriculum, compared to New York faculty. This result confirms the notion that Hong Kong employs a global knowledge perspective to comprehend an increasingly more global world (GFCI 2010). This perspective is especially important in the context of globalization in the education sector because it provides an avenue for developing human development (Clifford & Montgomery, 2015). Likewise, internationalization of curriculum should incorporate topics about conditions in nations around the world that equip teachers to adjust to and contribute to a rapidly changing world (Kahn & Agnew, 2017). Globalization not only brings many changes and challenges to our society generally, but specifically to the field of education (Schneider, 2003). The challenge for the education sector is to adapt to these fast-paced changes and

paradigm shifts to keep up with the international community. Despite this finding, one must note that only one internationalization outcome was predicted by the model, thereby limiting the applicability of the Blackburn's and Lawrence's (1995) theory. It is apparent that further studies must be done to identify the different factors that influence the predictability of each internationalization outcome.

Also, the results showed that there is a significant difference between the Hong Kong faculty and the QC faculty—Hong Kong faculty members are more likely to perceive themselves as having an internationalized curriculum. Being one of the top ten cities (GFCI 2010), Hong Kong requires its citizens to be more internationally knowledgeable than most places. This is because they have more experience and engagement in the research, professional presentations, collaborations, and publishing in the international settings. Nonetheless, results showed that, even though HKU faculty have been successful in representing themselves as being very much engaged in research, professional presentations, collaborations, and publishing and overall being internationalized, the teacher education programs in Hong Kong are still lacking in terms of internationalization of content. Most of the participants agree that the time spent in foreign countries enhanced their international knowledge and ability to share this with their students but only QC reported that they have been integrating more of the international content in the curriculum that they are teaching to the students in the home educational institutes.

The results also showed there is a focus on the integration of the international content in the curriculum on the part of QC faculty; however, as for KHU, studying abroad is much more favored. Although this result is not significant, it is interesting to note the difference in perspectives regarding internationalization of content. For a Western university such as QC, the movement is perceived to be inbound—acquire and integrate international content in the

curriculum. For an Eastern college such as HKU, the focus is on studying abroad to acquire and integrate content into one's learning processes. Comparing the faculty responses of QC and HKU, this study found that the focus of the QC faculty is the integration of the international content in the curriculum being taught to the students; however, the faculty of HKU showed much favor toward studying abroad and teaching in other languages. Comparing the responses of HKU and QC faculty shows that both faculty groups desire to include international content in their courses, yet the findings of this study do not prove that to be adequate.

Mobility was found to have no significant impact on the internationalization of content in the curriculum. Specifically, the results showed that QC faculty were more likely to include international content in their courses than faculty at HKU. However, the participants from both universities perceive that their institutions have included international content in their curriculum. This finding reflects how internationalization of higher education continues to evolve and expand, particularly in the context of globalized trends that make it more pertinent to the understanding of various cultures (Ozturgut et al., 2014). Due to this trend, the most prudent and proactive universities in developed countries have identified the formation of an open world market in the education sector as a response to the ever-changing curricula (Kennedy et al., 2015).

Moreover, the outcomes of the present study showed that the internationalization patterns of teachers were found to have a significant relationship with the impact magnitude. This finding confirms the notion that developing internationalized curriculum and content provides the tools for enhancing the competencies of teachers, so that the faculty could be well-equipped with the appropriate knowledge and intercultural skills to compete at the international level (Knight, 2004). Internationalization of the curriculum is expected to strengthen together with the

integration of international topics and content into existing programs (Autio, 2014; Cogan, 1998).

Recommendations

In this changing environment, as national boundaries become more porous through technology, immigration, and business and cultural exchanges, more and more individuals find themselves needing new knowledge and skills to succeed. Moreover, the new global economy also requires that individuals be multicultural in understanding and better informed about international issues. It has been presumed that many students only have the most basic knowledge of the geography and culture of world regions. In other words, knowledge of the world remains limited. Globalization is challenging education. The process effects of globalization are widespread including education, political systems, people's well-being, national security, public health/health care, national sovereignty, agriculture, economic systems/international trade, information technology/communication, transportation, and global governance (Niehaus et al., 2013). This study shows that with the ever-increasing changes in educational, social, economic, and political conditions and opportunities in nations around the world (i.e., New York and Hong Kong), it is imperative that schools respond rapidly to sustain and build on their current successes.

One basic requirement to sustain and build success in the education system is to address both knowledge and skills. It is essential to teach students to understand and analyze global trends and changes as well as the subsequent consequences of these trends and changes. At the same time, it is the responsibility of students to be aware of the movement of people within and across borders, economic instability, and the opportunities and the threat of globalization perceived by traditional societies resulting from changes in resource exploration and delivery. In

such instances, one of the many actions needed by schools to prepare for a more globalized society is to examine the preparation of teachers. To address the changes that come with a more global society, prospective teachers need skills and bodies of knowledge. In other words, teachers need to effectively guide their own students to know about the world (Mahon, 2010). It is also recommended that further conceptualization must be done to understand how internationalization occurs in universities, to allow researchers and practitioners to identify the different factors that affect internationalization.

Three main factors directly linked to the state of education are development, economic growth, and improved living standards. Students can be effectively made more internationally and culturally knowledgeable through teacher preparation programs (Mok & Cheung, 2011). In our rapidly changing world, educators today must not only become versed in world affairs, but also they need to help their students adopt a global perspective and build the needed skills. Success will require a transformation in both what and how we teach and how we prepare teachers. It is also important to recognize that it is primarily the responsibility of institutions of higher education to train teachers to provide graduates with the knowledge and experience necessary to help them infuse global knowledge in their classrooms. Along with the institutions of higher education, it is the responsibility of faculty members to produce the content for teacher preparation programs.

Teacher training programs must include best practices as well as theory knowledge on global issues. This is a very specialized way of teaching for a very complex multifaceted field. Well-trained teachers are the key to good school performance; therefore, the content for teacher preparation programs is of utmost importance. In addition to this initial teacher training, emphasis must also be placed on continual professional development of teachers that enhances

not only new best practices but provides knowledge of global issues necessary for our students to remain competitive. From this study of New York and Hong Kong, it is recommended that institutions invest in the continuous improvement and development and internationalization of the quality of teacher education programs.

This study recommends that institutes of education in Hong Kong remain active participants in the current reforms of educational internationalization. Educational institutions in Hong Kong should take decisive actions and carry out plans to actively participate in the process of internationalizing teacher education programs. In addition to being one of the major players in the international market, Hong Kong has the opportunity to attain a position as a prominent regional hub for offering high-quality teacher education programs.

Recommendations for Future Studies

Based on the results of the study, it is highly recommended that internationalized training of future teachers is of utmost importance to stay competitive in the global market. Teacher education programs are responsible for providing best practices and globalized knowledge necessary to produce good quality teachers. Therefore, it is recommended that institutions of higher education invest in their teacher education programs.

The study showed that institutions in both Hong Kong and New York recognized the importance of internationalization of their teacher education; however, the realization is not enough. Both institutions need to take steps to more actively engage their teacher education faculty in the internationalization of their programs. Future studies to determine strategies for incorporating international content into teacher education programs while still maintaining the emphasis on best practices would prove useful. In addition, the assessment of these programs will be necessary. Research on what would be the most suitable assessment tools to determine

the outcomes of these programs will be required. Further studies are also necessary to determine how public policy affects the internationalization of teacher education programs.

Since the completion of this study, we had the 2016 Presidential election that led to key events affecting the climate for internationalization of higher education. In 2017, the proposed budget cuts to international education programs, the various iterations of Trump's travel ban, and the end of the Deferred Action for Childhood Arrivals (DACA) program led to a demoralized mood in higher education representatives. According to Altbach and deWit (2017), as the immigration and visa restrictions grow, the U.S. will be seen as less attractive for international students. That, combined with cutbacks of governmental support for programs such as Fulbright, will cause a change in the internationalization of higher education. We have entered an unpredictable and challenging period for higher education internationalization. However, new challenges also mean new opportunities and the possibility of creative solutions and innovative thinking. Future studies to determine strategies and proactive problem-solving solutions would be useful as we navigate new policies and challenges in education as they arise.

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APPENDICES

Appendix A: Survey Instrument

Personal:

- 1. What was/is your nationality/citizenship and your country of residence?
- At birth
- At the time of your first degree
- Currently
- 2. What is your first language/mother tongue?
- 3. How many languages do you speak? What languages?
- 4. How many years since the award of your first degree, have you spent:
 ____ in the country of your first degree
 ___ in the country in which you are currently employed, if different from the country of your first degree
 ___ in other countries outside the country of your first degree and current employment

Teaching:

- 5. During the current (or previous) academic year, are you teaching any courses abroad?
- 6. Do your courses include topics of internationalization (your personal experiences, etc.)?
- 7. Do your courses include the use of technology as vehicle to collaborate with international colleagues?
- 8. Do your courses include the option of study abroad?
- 9. Do your courses include the option of practice teaching abroad for pre-service candidates?
- 10. Do your courses include the option of overseas experiences with faculty for your students?
- 11. Do your courses include the option of foreign language requirement? If so what is the requirement?
- 12. Do your courses include the option of international student serving as cultural resources for courses or related activities?
- 13. Do your courses include discussion on education pedagogy and best practices in other countries?

- 14. As part of your courses, do you offer the pre-service candidate the option of practice teaching in a bilingual or magnet school in the U.S.?
- 15. Do you teach a special topic course with internationalization as the focus?
- 16. Do you teach only in English? If not, please specify what other language.

Research:

- 17. Have you published in the last five years? Have you published in a language different from your language of instruction?
- 18. Are you actively engaged in research? Would you characterize your research efforts as international in scope or orientation?
- 19. Do you present at professional conferences at least once per year? Do you (or have you) do joint presentations with international colleagues?
- 20. Do you collaborate with colleagues at least once per year? Do you (or have you) collaborate with international colleagues?
- 21. Have you co-authored with international colleagues?
- 22. Have you published in a foreign country?

Appendix B: Report on the Relationship to the Full List of Indicators in Tables 7 and 8

Tables 1 to 17 examined successively the relationship of demographic, career characteristics and self-knowledge characteristics to each of eleven indicators of integration of international content into the curriculum and the six indicators of faculty research and professional networks.

Table 1. Percent indicating that their Course includes (or not) non-US Comparative or Global Dimension by Demographic, Career and Self-knowledge Characteristics

	HKU/QC N=68
Demographics Citizenship at Dirth is US on UV/China	22
Citizenship at Birth is US or HK/China Citizenship Time of 1 st Degree is US or HK/China	27
Citizenship Currently US or HK/China Mother Tongue English or Chinese	24 23
Company Champatanistics	
Career Characteristics Number of Languages 1	31
<u> </u>	14
2 3	53
Number of Years since Award of 1 st Degree spent in Country of 1 st Degree	
Month or less	5
1 to 5 years	67
5 to 10 years	25
10 to 15 years	33
15 or more	23
Number of Years since Award 1 st Degree spent in Country Employed if Different from 1 st	
Degree	
Month or less	20
1 to 5 years	35
5 to 10 years	67 50
10 to 15 years 15 or more	50 0
13 Of IHOIC	U

Number Years since Awarded 1 st Degree spent in other Countries outside the Country of 1 st Degree and Current Employment	
Month or less 1 to 5 years 5 to 10 years 10 to 15 years	10 30 33 50
15 or more Self-knowledge Characteristics Interest in Research	59
Commitment to Publishing	39
Interest in Professional Presentations	34
Interest in Collaboration	33

Table 2. Percent indicating that their Course uses technology for communications/collaborations with faculty and students from other countries by Demographic, Career and Self-knowledge Characteristics

	HKU/QC
	N=68
Demographics	
Citizenship at Birth is US or HK/China	6
Citizenship Time of 1st Degree is US	6
or	
HK/China	
Citizenship Currently US or HK/China	10
Mother Tongue English or Chinese	6
Career Characteristics	
- 11- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	1.2
Number of Languages 1	13
2	3
3	20

	1
Number of Years since Award	
of 1 st Degree spent in Country	
of 1 begree spent in country	
Month or less	50
1 to 5 years	0
5 to 10 years	0
10 to 15 years	$\overset{\circ}{0}$
15 or more	9
Number of Years since Award	
1 st Degree spent in Country	
Employed if Different from 1 st	
Degree	
Month or less	7
1 to 5 years	10
5 to 10 years	33
10 to 15 years	0
15 or more	0
Number Years since Awarded	
1 st Degree spent in other	
Countries outside the Country	
of 1 st Degree and Current	
Employment	
Month or less	13
1 to 5 years	0
5 to 10 years	0
10 to 15 years	0
15 or more	8
Self-knowledge Characteristics	
Interest in Research	18
Commitment to Publishing	39
Interest in Professional Presentations	12
Interest in Collaboration	11

Table 3. Percent indicating that their Course includes study abroad by Demographic, Career and Self-knowledge Characteristics

	HKU/QC
	N=68
Demographics	
Citizenship at Birth is US or HK/China	8
Citizenship Time of 1 st Degree is US	8

112

or	
HK/China Citizenship Currently US or HK/China Mother Tongue English or Chinese	8 8
Career Characteristics Number of Languages 1 2 3	0 5 20
Number of Years since Award of 1 st Degree spent in Country of 1 st Degree	
Month or less	0
1 to 5 years	0
5 to 10 years 10 to 15 years	0 67
15 or more	5
Number of Years since Award 1 st Degree spent in Country Employed if Different from 1 st Degree Month or less 1 to 5 years 5 to 10 years 10 to 15 years 15 or more Number Years since Awarded 1 st Degree spent in other Countries outside the Country	2 10 0 0 100
of 1 st Degree and Current	
Employment	
Month or less	0
1 to 5 years	25 0
5 to 10 years 10 to 15 years	0
15 or more	17
Calfilan and also Characteristics	
Self-knowledge Characteristics Interest in Research	18
interest in resourch	10
Commitment to Publishing	28
Interest in Professional Presentations	12

International Collaboration

11

Table 4. Percent indicating that their Course includes options of practice teaching abroad for preservice candidates by Demographic, Career and Self-knowledge Characteristics

	HKU/QC N=68
Demographics	
Citizenship at Birth is US or HK/China	0
Citizenship Time of 1 st Degree is US	0
or	
HK/China	
Citizenship Currently US or HK/China	0
Mother Tongue English or Chinese	0
Career Characteristics	
Number of Languages 1	0
	0
2 3	0
Number of Years since Award of 1 st Degree spent in Country of 1 st Degree	
Month or less	0
1 to 5 years	0
5 to 10 years	0
10 to 15 years	0
15 or more	0
Number of Years since Award 1 st Degree spent in Country Employed if Different from 1 st Degree	
Month or less	0
1 to 5 years	0
5 to 10 years	0
10 to 15 years	0
15 or more	0
Number Years since Awarded	
1 st Degree spent in other	
Countries outside the Country	
of 1 st Degree and Current	
Employment	
Month or less	0
1 to 5 years	0

5 to 10 years	0
10 to 15 years	0
15 or more	0
Self-knowledge Characteristics	
Interest in Research	0
Commitment to Publishing	0
Interest in Professional Presentations	0
Interest in Collaboration	0

Table 5. Percent indicating that their Course includes options of overseas experience with faculty for students by Demographic, Career and Self-knowledge Characteristics

	HKU/QC N=68
Demographics	
Citizenship at Birth is US or HK/China	10
Citizenship Time of 1 st Degree is US	8
or	
HK/China	
Citizenship Currently US or HK/China	11
Mother Tongue English or Chinese	10
Career Characteristics	
Number of Languages 1	13
2	5
3	27
Number of Years since Award	
of 1 st Degree spent in Country	
of 1 st Degree	
Month or less	50
1 to 5 years	33
5 to 10 years	0
10 to 15 years	67
15 or more	7

Number of Years since Award 1 st Degree spent in Country Employed if Different from 1 st Degree	
Month or less	10
1 to 5 years	10
5 to 10 years	0
10 to 15 years	0
15 or more	100
Number Years since Awarded 1 st Degree spent in other	
Countries outside the Country	
of 1 st Degree and Current	
Employment	
Month or less	10
1 to 5 years	0
5 to 10 years	0
10 to 15 years	25
15 or more	17
Self-knowledge Characteristics	
Interest in Research	27
Commitment to Publishing	33
Interest in Professional Presentations	17
Interest in Collaboration	16

Table 6. Percent indicating that their Course includes options of foreign language requirement by Demographic, Career and Self-knowledge Characteristics

	HKU/QC N=68
Demographics	11 00
Citizenship at Birth is US or HK/China	14
Citizenship Time of 1 st Degree is US	13
or	
HK/China	
Citizenship Currently US or HK/China	3
Mother Tongue English or Chinese	18
Career Characteristics	
Number of Languages 1	19
2	17

3	13
Number of Years since Award of 1 st Degree spent in Country of 1 st Degree Month or less 1 to 5 years	0 67
5 to 10 years 10 to 15 years 15 or more	25 33 13
Number of Years since Award 1 st Degree spent in Country Employed if Different from 1 st Degree	
Month or less 1 to 5 years 5 to 10 years 10 to 15 years 15 or more	12 25 33 0 0
Number Years since Awarded 1 st Degree spent in other Countries outside the Country of 1 st Degree and Current Employment	
Month or less 1 to 5 years 5 to 10 years 10 to 15 years 15 or more	17 0 0 25 29
Self-knowledge Characteristics Interest in Research	23
Commitment to Publishing	6
Interest in Professional Presentations	22
Interest in Collaboration	22

Table 7. Percent indicating that their Course includes options of international students serving as cultural resources for courses or related activities by Demographic, Career and Self-knowledge Characteristics

HKU/QC
N=68

D 1:	İ
Demographics Citizenship at Birth is US or HK/China Citizenship Time of 1 st Degree is US	17 17
or HK/China Citizenship Currently US or HK/China Mother Tongue English or Chinese	21 18
Career Characteristics	
Number of Languages 1 2 3	33 14 38
Number of Years since Award of 1 st Degree spent in Country of 1 st Degree	
Month or less	50
1 to 5 years	67
5 to 10 years	25
10 to 15 years	33
15 or more	20
Number of Years since Award 1 st Degree spent in Country Employed if Different from 1 st Degree	
Month or less	24
1 to 5 years	20
5 to 10 years	33
10 to 15 years	50
15 or more	0
Number Years since Awarded 1 st Degree spent in other Countries outside the Country of 1 st Degree and Current Employment	
Month or less	27
1 to 5 years	0
5 to 10 years	0
10 to 15 years	25
15 or more	29
Calfilance data Characteristic	
Self-knowledge Characteristics Interest in Research	41
interest in Research	41

Commitment to Publishing	22
Interest in Professional Presentations	29
Interest in Collaboration	31

Table 8. Percent indicating that their Course includes non-US comparative or global issues research materials about other countries educational systems by Demographic, Career and Self-knowledge Characteristics

	HKU/QC N=68
Demographics	
Citizenship at Birth is US or HK/China	25
Citizenship Time of 1 st Degree is US	22
or	
HK/China	
Citizenship Currently US or HK/China	21
Mother Tongue English or Chinese	18
Career Characteristics	
Number of Languages 1	25
5 5	23
2 3	60
5	00
Number of Years since Award	
of 1 st Degree spent in Country	
of 1 st Degree	
Month or less	18
1 to 5 years	33
5 to 10 years	50
10 to 15 years	33
15 or more	29
Number of Years since Award	
1 st Degree spent in Country	
Employed if Different from 1 st	
Degree	
Month or less	24
1 to 5 years	40
5 to 10 years	66
10 to 15 years	50
15 or more	0
Number Years since Awarded	

1 st Degree spent in other	
Countries outside the Country	
of 1 st Degree and Current	
Employment	
Month or less	21
1 to 5 years	0
5 to 10 years	0
10 to 15 years	25
15 or more	29
Self-knowledge Characteristics Interest in Research	59
Commitment to Publishing	44
Commitment to Publishing Interest in Professional Presentations	44 41
C	

Table 9. Percent indicating that their Course includes options of practice teaching at bilingual or magnet schools by Demographic, Career and Self-knowledge Characteristics

	HKU/QC N=68
Demographics	
Citizenship at Birth is US or HK/China	21
Citizenship Time of 1 st Degree is US	21
or	
HK/China	
Citizenship Currently US or HK/China	21
Mother Tongue English or Chinese	23
Career Characteristics Number of Languages 1 2 3	44 11 13
Number of Years since Award	
of 1 st Degree spent in Country	
of 1 st Degree	
Month or less	50
1 to 5 years	0
5 to 10 years	0
10 to 15 years	0
15 or more	21

Number of Years since Award 1 st Degree spent in Country Employed if Different from 1 st Degree Month or less 1 to 5 years 5 to 10 years 10 to 15 years 15 or more Number Years since Awarded 1 st Degree spent in other Countries outside the Country of 1 st Degree and Current	29 5 0 0
Employment Month or less 1 to 5 years	30
5 to 10 years	0
10 to 15 years	0
15 or more	17
Self-knowledge Characteristics Interest in Research	27
Interest in Research	27
Commitment to Publishing	44
Interest in Professional Presentations	12
Interest in Collaboration	16

Table 10. Percent indicating that they teach a special topic course with internationalization as the focus by Demographic, Career and Self-knowledge Characteristics

	HKU/QC
	N=68
Demographics	
Citizenship at Birth is US or HK/China	18
Citizenship Time of 1 st Degree is US	3
or	
HK/China	
Citizenship Currently US or HK/China	21
Mother Tongue English or Chinese	5

Career Characteristics Number of Languages 1 2 3	6 3 17
Number of Years since Award of 1st Degree spent in Country of 1st Degree Month or less 1 to 5 years 5 to 10 years 10 to 15 years 15 or more	50 33 25 0 5
Number of Years since Award 1 st Degree spent in Country Employed if Different from 1 st Degree Month or less 1 to 5 years 5 to 10 years 10 to 15 years 15 or more	7 15 0 0
Number Years since Awarded 1 st Degree spent in other Countries outside the Country of 1 st Degree and Current Employment Month or less 1 to 5 years 5 to 10 years 10 to 15 years 15 or more	7 0 0 25 13
Self-knowledge Characteristics	23
Interest in Research	23
Commitment to Publishing	28
Interest in Professional Presentations	15
Interest in Collaboration	13

Table 11. Percent indicating that they teach in other languages by Demographic, Career and Self-knowledge Characteristics

	HKU/QC N=68
Demographics	
Citizenship at Birth is US or HK/China	11
Citizenship Time of 1 st Degree is US	10
or	
HK/China	
Citizenship Currently US or HK/China	3
Mother Tongue English or Chinese	11
8 2 1 1 121	
Career Characteristics	
Number of Languages 1	6
	9
2 3	53
Č	
Number of Years since Award	
of 1 st Degree spent in Country	
of 1 st Degree	
Month or less	10
1 to 5 years	33
5 to 10 years	50
10 to 15 years	33
15 or more	13
Number of Years since Award	
1 st Degree spent in Country	
Employed if Different from 1 st	
Degree	
Month or less	10
1 to 5 years	30
5 to 10 years	33
10 to 15 years	50
15 or more	0
Number Years since Awarded	
1 st Degree spent in other	
Countries outside the Country	
of 1 st Degree and Current	
Employment	
Month or less	10
1 to 5 years	0
5 to 10 years	17
10 to 15 years	25

15 or more	29
Self-knowledge Characteristics Interest in Research	41
Commitment to Publishing	44
Interest in Professional Presentations	29
Interest in Collaboration	27

Table 12. Percent indicating research interest international in scope or orientation by Demographic, Career and Self-knowledge Characteristics

	HKU/QC N=68
Demographics	
Citizenship at Birth is US or HK/China	13
Citizenship Time of 1 st Degree is US	15
or	
HK/China	
Citizenship Currently US or HK/China	18
Mother Tongue English or Chinese	11
Career Characteristics	
Number of Languages 1	14
2	56
3	21
Number of Years since Award	
of 1 st Degree spent in Country	
of 1 st Degree	
Month or less	6
1 to 5 years	64
5 to 10 years	25
10 to 15 years	36
15 or more	21

Number of Years since Award 1 st Degree spent in Country Employed if Different from 1 st Degree	
Month or less	19
1 to 5 years	38
5 to 10 years	64
10 to 15 years	43
15 or more	3
Number Years since Awarded 1 st Degree spent in other	
Countries outside the Country	
of 1 st Degree and Current	
Employment	
Month or less	14
1 to 5 years	33
5 to 10 years	30
10 to 15 years	55
15 or more	2
Self-knowledge Characteristics	
Interest in Research	64
Commitment to Publishing	42
Interest in Professional Presentations	38
Interest in Collaboration	78
	1

Table 13. Percent indicating a publishing in different languages by Demographic, Career and Self-knowledge Characteristics

HKU/QC
N=68
19
21
18
22
38
23
49

Number of Years since Award of 1 st Degree spent in Country of 1 st Degree Month or less 1 to 5 years 5 to 10 years 10 to 15 years 15 or more	32 68 32 43 18
Number of Years since Award 1 st Degree spent in Country Employed if Different from 1 st Degree	
Month or less 1 to 5 years 5 to 10 years 10 to 15 years 15 or more	19 24 60 43 12
Number Years since Awarded 1 st Degree spent in other Countries outside the Country of 1 st Degree and Current Employment	
Month or less 1 to 5 years 5 to 10 years 10 to 15 years 15 or more	23 19 33 41 12
Self-knowledge Characteristics Interest in Research	48
Commitment to Publishing	53
Interest in Professional Presentations	76
Interest in Collaboration	35

Table 14. Percent indicating join presentations with international colleagues by Demographic, Career and Self-knowledge Characteristics

	HKU/QC
	N=68
Demographics	

Citizenship at Birth is US or HK/China Citizenship Time of 1 st Degree is US or	23 27
HK/China Citizenship Currently US or HK/China Mother Tongue English or Chinese	22 24
Career Characteristics Number of Languages 1 2 3	48 12 19
Number of Years since Award of 1 st Degree spent in Country of 1 st Degree	
Month or less 1 to 5 years 5 to 10 years 10 to 15 years 15 or more	58 34 29 3 8
Number of Years since Award 1 st Degree spent in Country Employed if Different from 1 st Degree	
Month or less 1 to 5 years 5 to 10 years 10 to 15 years 15 or more	13 5 18 39 38
Number Years since Awarded 1 st Degree spent in other Countries outside the Country of 1 st Degree and Current Employment	
Month or less	12
1 to 5 years	30
5 to 10 years	33
10 to 15 years 15 or more	48 0
13 of more	U
Self-knowledge Characteristics	
Interest in Research	56
Commitment to Publishing	28

Interest in Professional Presentations	69
Interest in Collaboration	71

Table 15. Percent indicating international collaborations by Demographic, Career and Self-knowledge Characteristics

	HKU/QC N=68
Demographics	
Citizenship at Birth is US or HK/China	18
Citizenship Time of 1 st Degree is US	11
or	
HK/China	
Citizenship Currently US or HK/China	8
Mother Tongue English or Chinese	17
Career Characteristics	9
Number of Languages 1	14
2 3	59
3	
Number of Years since Award	
of 1 st Degree spent in Country	
of 1 st Degree	
Month or less	15
1 to 5 years	35
5 to 10 years	50
10 to 15 years	12
15 or more	2
Number of Years since Award	
1 st Degree spent in Country	
Employed if Different from 1 st	
Degree	
Month or less	10
1 to 5 years	31
5 to 10 years	29
10 to 15 years	50
15 or more	0
Number Years since Awarded	
1 st Degree spent in other	
Countries outside the Country	
of 1 st Degree and Current	

Employment	
Month or less	10
1 to 5 years	0
5 to 10 years	18
10 to 15 years	26
15 or more	37
Self-knowledge Characteristics Interest in Research	39
Commitment to Publishing	27
Interest in Professional Presentations	45
Interest in Collaboration	62
	i

Table 16. Percent indicating they co-authored with international colleagues by Demographic, Career and Self-knowledge Characteristics

	HKU/QC N=68
Demographics	
Citizenship at Birth is US or HK/China	23
Citizenship Time of 1st Degree is US	28
or	
HK/China	
Citizenship Currently US or HK/China	24
Mother Tongue English or Chinese	31
Career Characteristics	
Number of Languages 1	33
2	13
3	58
Number of Years since Award	
of 1 st Degree spent in Country	
of 1 st Degree	
Month or less	11
1 to 5 years	68
5 to 10 years	29
10 to 15 years	33
15 or more	21

Number of Years since Award 1 st Degree spent in Country Employed if Different from 1 st Degree	
Month or less	19
1 to 5 years	37
5 to 10 years	78
10 to 15 years	33
15 or more	0
Number Years since Awarded	
1 st Degree spent in other	
Countries outside the Country	
of 1 st Degree and Current	
Employment	
Month or less	28
1 to 5 years	31
5 to 10 years	56
10 to 15 years	62
15 or more	14
Self-knowledge Characteristics	
Interest in Research	68
Commitment to Publishing	43
Interest in Professional Presentations	78
Interest in Collaboration	64
	1

Table 17. Percent indicating they published in a foreign language by Demographic, Career and Self-knowledge Characteristics

	HKU/QC N=68
Demographics	11 00
Citizenship at Birth is US or HK/China	11
Citizenship Time of 1 st Degree is US	8
or	
HK/China	
Citizenship Currently US or HK/China	6
Mother Tongue English or Chinese	10
Career Characteristics	
Number of Languages 1	18
2	33

3	21
Number of Years since Award of 1 st Degree spent in Country of 1 st Degree	
Month or less	34
1 to 5 years	0
5 to 10 years	0
10 to 15 years	13
15 or more	9
Number of Years since Award 1 st Degree spent in Country Employed if Different from 1 st	
Degree	
Month or less	11
1 to 5 years	24
5 to 10 years	47
10 to 15 years	0
15 or more	0
Number Years since Awarded	
1 st Degree spent in other	
Countries outside the Country	
of 1 st Degree and Current	
Employment	
Month or less	19
1 to 5 years	8
5 to 10 years	8
10 to 15 years 15 or more	0 19
13 of more	19
Self-knowledge Characteristics	
Interest in Research	18
Commitment to Publishing	23
Interest in Professional Presentations	11
Interest in Collaboration	37

Appendix C: Respondents Career Characteristics

	HKU		QC N=31
	N=37	,	
	Reporting 9	%	
No. Language spoken	1		51
	0 2	70	36 13
	3 or more	70	13
	30		
Years since awarded	Month or less		7
first degree spent in the	0		4
country of your first	1 to 5 years		0
degree:	5 to 10 years		0 89
	11		67
	10 to 15 years		
	8		
	15 or more		
Years since awarded	76 Month or less		78
first degree spent in	16		0
country employed if	1 to 5 years		0
different from first	11		0
degree:	5 to 10 years		22
	16		
	10 to 15 years 11		
	15 or more		
	46		
Years since awarded	Month or less		84
first degree spent in	41		16
other countries outside	1 to 5 years 41		$0 \\ 0$
the country of your first degree and current	5 to 10 years		0
employment:	8		v
	10 to 15 years		
	5		
	15 or more 5		
	J		
		l	

Appendix D: Institutional Review Board Approval Letters



May 18, 2010

Maribel Roman

Dear Mr. Roman,

The Seton Hall University Institutional Review Board has reviewed and approved as submitted under expedited review your research proposal entitled "Internationalization of Teacher Faculty: Comparative Study between New York and Hong Kong". The IRB reserves the right to recall the proposal at any time for full review.

Enclosed for your records are the signed Request for Approval form, the stamped Letter of Solicitation, and the stamped original Consent Form. Make copies only of these stamped forms.

The Institutional Review Board approval of your research is valid for a one-year period from the date of this letter. <u>During this time</u>, any changes to the research protocol must be reviewed and approved by the IRB prior to their implementation.

According to federal regulations, continuing review of already approved research is mandated to take place at least 12 months after this initial approval. You will receive communication from the IRB Office for this several months before the anniversary date of your initial approval.

Thank you for you cooperation.

In harmony with federal regulations, none of the investigators or research staff involved in the study took part in the final decision.

Sincerely,

Mary F. Ruzicka, Ph.D. Professor

Director, Institutional Review Board

Many (1. Lunicla, Ph. D)

cc: Dr. Martin Finkelstein



Office of Regulatory Compliance IRB (Human Subjects) • IACUC (Animal Use) • IBC (Biohazards/Recombinant DNA)

PROJECT DIRECTOR COPY

May 18, 2010

Mrs Maribel Roman Education

RE: 10-04-051-4578 Internationalization of Teacher Education Faculty: A Comparative Study between New York and Hong Kong

Dear Mrs Roman:

The Queens College IRB00004578 has approved the above study involving humans as research subjects. This study was Approved - Expedited Category: 7 - based on 45CFR46.

<u>IRB Number:</u> 10-04-051-4578 This number is a Queens College IRB00004578 number that should be used on all consent forms and correspondence.

Approval Date:

May 12, 2010

Expiration Date:

May 11, 2011

THIS APPROVAL IS FOR A PERIOD OF ONE-YEAR OR LESS. YOU SHOULD RECEIVE A COURTESY RENEWAL NOTICE BEFORE THE EXPIRATION OF THIS PROJECT'S APPROVAL. HOWEVER, IT IS YOUR RESPONSIBILITY TO INSURE THAT AN APPLICATION FOR CONTINUING REVIEW APPROVAL HAS BEEN SUBMITTED BEFORE THE EXPIRATION DATE NOTED ABOVE. IF YOU DO NOT RECEIVE APPROVAL BEFORE THE EXPIRATION DATE, ALL STUDY ACTIVITIES MUST STOP UNTIL YOU RECEIVE A NEW APPROVAL LETTER. THERE WILL BE NO EXCEPTIONS. IN ADDITION, YOU ARE REQUIRED TO SUBMIT A FINAL REPORT OF FINDINGS AT THE COMPLETION OF THE PROJECT.

Consent Form: All research subjects must use the approved and stamped consent form. You are responsible for maintaining signed consent forms for each research subject for a period of at least three years after study completion.

Mandatory Reporting to the IRB: The principal investigator must report, within five business days, any serious problem, adverse effect, or outcome that occurs with frequency or degree of severity greater than that anticipated. In addition, the principal investigator must report any event or series of events that prompt the temporary or permanent suspension of a research project involving human subjects or any deviations from the approved protocol.

Amendments/Modifications: All amendments/modifications of protocols involving human subjects must have prior IRB approval, except those involving the prevention of immediate harm to a subject. Amendments/modifications for the prevention of immediate harm to a subject must be reported within 24 hours to the IRB.

Stipulations: You must submit a copy of Seton Hall's IRB approval before data collection can begin.

For 'Other' research location, please specify: Surveys mail to CUNY and Hong Kong University faculty and interviews conducted via telephone unless CUNY faculty prefers in person interview

Queens College, CUNY • 65-30 Kissena Boulevard Flushing, New York 11367-1597 • 718-997-5415 • Fax 718-997-5549

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If you have any questions, please do not hesitate to contact Barbara P. Lermand, MA in the IRB Office at 718-997-5415.

. Dowell, Ph. D.

Good luck on your project.

Sincerely,

Lynn C. Howell, PhD IRB Vice Chair

cc: David Gerwin PhD

SEYS

Sign the Verification Statement below. Return the original signed copy of this letter to the IRB Office and retain a copy for your records. The IRB Office must receive a copy of the signed verification statement before research may begin.

VERIFICATION:

BY SIGNING BELOW, I ACKNOWLEDGE THAT I HAVE RECEIVED THIS APPROVAL AND AM AWARE OF, AND AGREE TO ABIDE BY, ALL OF ITS STIPULATIONS IN ORDER TO MAINTAIN ACTIVE APPROVAL STATUS, INCLUDING TIMELY SUBMISSION OF CONTINUING REVIEW APPLICATIONS AND PROPOSED PROTOCOL MODIFICATIONS, AS WELL AS PROMPT REPORTING OF ADVERSE EVENTS, SERIOUS UNANTICIPATED PROBLEMS, AND PROTOCOL DEVIATIONS. I AM AWARE THAT IT IS MY RESPONSIBILITY TO BE KNOWLEDGEABLE OF ALL FEDERAL, STATE AND UNIVERSITY REGULATIONS REGARDING HUMAN SUBJECTS RESEARCH INCLUDING CUNY'S FEDERALWIDE ASSURANCE (FWA) WITH THE DEPARTMENT OF HEALTH AND HUMAN SERVICES OFFICE OF HUMAN RESEARCH PROTECTIONS.

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