

U.S. Based Business Needs for Technical/Occupational Employees with International
Skills: Considerations for Community College and Sub-Baccalaureate Programs
in the Tampa Bay Economic Zone.

by

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Dedication

This dissertation is dedicated to my bride, Christine Olney, who has been my lover, my best friend, my inspiration and my mate for 30 short years. It is also dedicated to our children, Elizabeth and Hannah: they are my hope for the world's future, and to my siblings, Greg Olney, Donna Passmore and Sue Beck: they are my grounding. Finally, this dissertation is dedicated to my parents, Greg and Vel Olney. My father taught me selfless service to higher callings and my mother taught me to be passionate about living. With these forces encouraging and supporting me, there have been no hills for this stepper.

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U.S. Based Business Needs for Technical/Occupational Employees with International Skills: Considerations for Community College and Sub-Baccalaureate Programs in the Tampa Bay Economic Zone.

Ronald L. Olney

ABSTRACT

Significance

This study provides the first systematic needs assessment of a U.S. business region to determine if businesses want international skills taught in community college technical and occupational programs. Without this assessment, community college leaders and faculty are not able to determine whether they are adequately preparing students in these skills to be successful in tomorrow's fast paced, mobile and integrated global workforce.

Research Aims

1. Conduct a needs assessment to determine whether international skills were considered important for employment entry or movement
2. Determine where businesses obtain international skills training.
3. Garner business recommendations for the improvement of international skills education in community college technical and occupational programs.

Research Questions

1. What international skills do surveyed U.S. business and industry executives believe are important for the sub-baccalaureate technical/occupational employees that they hire and promote?
2. How do surveyed U.S. business and industry executives engage their companies' sub-baccalaureate technical/occupational employees in international skills training programs?
3. How do surveyed business and industry executives think U.S. community college technical/occupational degree programs should change with respect to their international skills objectives?

Methods

This study utilized a researcher created and empirically validated survey and two focus groups. The survey was sent to 1,920 businesses randomly sampled from Tampa Bay's 64,000 businesses. Response data from 145 returned questionnaires were analyzed and then discussed by business and community college focus groups.

Findings

1. Appreciation of Cross Cultural Differences and Foreign Language Skills were rated significantly ($p \leq .05$) higher in importance than other international skills.
2. Businesses utilize in-house trainers more often than any other type of training resource for international training. Community Colleges are rarely used as a training resource for international skills.

3. Community colleges should investigate whether to increase their academic outreach to businesses, mandate foreign language training in programs, and emphasize learning about other world areas in the curriculum.

4. Nation-wide surveys of Fortune 500 firms to determine international business practices and training needs may not translate to regional business communities.

Chapter One

Introduction

Community colleges are crucial to the training and education of the technical and occupational employees of American industry (Kirby, 2006). In recent decades this role has become more dynamic due to accelerating globalization and international market competition (Committee for Economic Development, 2006; Hughes, 2006; Kirby, 2006; Levin, 2000). To provide a workforce that is able to meet industry's demands, community colleges have developed various strategies and partnerships that have helped ensure that former technical and occupational students have the requisite skills to operate state-of-the-art equipment and manage the newest business systems (Brown, 2001; Dougherty & Bakai, 2000; Levine, 2004; Marshall, 2006; The NEW Commission on the Skills of the American Workforce, 2006). Further, there has been a growing demand for U.S. employees to demonstrate skills in working productively with and within different cultures and national settings, as well as a need for managers to demonstrate a global perspective in problem solving (Green & Olson, 2003; Kedia & Daniel, 2003). While it is evident that business owners and senior business leaders of U.S. firms recognize the need for these international skills in senior leaders to remain competitive in the world-wide marketplace, it is currently unclear whether the need for these skills have filtered down past the management levels to the technical and occupational positions filled by sub-baccalaureate employees.

Background

The mission of U.S. community colleges includes a strong commitment to providing technological and occupational training and education programs for the American workforce. From their inception and agrarian roots, community colleges have grown and broadened their offerings and have remained instrumental in the preparation of the skilled operators needed by business (Cohen & Brawer, 2003). This mission began when the demand for higher education outgrew university capabilities in the early 20th century. Academicians supported the separation of lower division and vocational education classes from the more intense research base of upper division and post graduate programs (Eells, 1941). It was envisioned that the creation of post high school vocational training institutions would allow masses of skilled laborers to be trained in the latest technologies and occupations while providing the opportunity for young people to gain maturity and insights into the work environment (Douglass, 2000; Koos, 1924). Junior colleges, and later community colleges, took on the majority of this student load.

From 1915 to mid 1970s, junior (community) colleges grew from 74 to about 1230 institutions (Cohen & Brawer, 2003). This growth was spurred on by numerous state and federal education and workforce programs and a population demanding general education, remedial education, continuing education, community education as well as increasingly diverse vocational and technological programs (Cohen & Brawer, 2003; Levin, 2000).

The 1917 Smith-Hugh Act created the first of many federal programs that have supported, molded and broadened vocational training in the community (junior)

colleges over the past century. These programs, working in conjunction with, and sometimes in opposition to, state and local programs, have been instrumental in allowing the community colleges to remain cost efficient and viable providers of a skilled workforce for the U.S. economic engine (Cohen & Brawer, 2003).

In conjunction with the funding support of vocational/technical education over the past century, three other trends have influenced the growth of vocational programs in recent decades. These trends include a change in the public's perception of the purpose of college from providing a liberal education to providing profession-specific technical skills, the growing trend for increased credentialing within an expanding number of U.S. industries, and the transformation of industries brought about by globalization (Friedman, 2005; Jacobs, 2001; Michie & Smith, 1998).

As a force of transformation, globalization has taken on a mantle of urgency in U.S. businesses and colleges. Widely defined as "...what happens when the movement of people, goods, or ideas among countries and regions accelerates" (Coatsworth, 2004), globalization has manifest itself in particular changes in the way business is being done. In particular, changes in U.S. business have included increased global competition, disintermediation, offshoring of manufacturing, back room and customer support operations, more diverse clientele in U.S. establishments and closer international coordination of business processes at lower levels of operation (Kearney, 2004).

Community colleges have experienced these changes in both their administrative and academic operations. As businesses, community colleges have experienced the effects of globalization in their day to day operations and in their

institutional competition with other higher education organizations. As teaching organizations, community colleges have been subjected to transformational forces that have caused rapid changes and alterations in curriculum content and methods in an attempt to meet the accelerating changes demanded by students, businesses and the public and in response to rapid information growth (Levin, S. L., 2002).

In response to industry's demands for different technical/occupational skill sets, community colleges have participated in various strategies to align curriculums with needs (Committee on Science and Technology, 2007; Levin, 2000; Vaughn, 2006). These strategies have included dual enrollment initiatives, corporate advisory and partnership initiatives, local, state and federal workforce programs and strategies to align 2 year and 4 year articulation agreements between institutions. These actions have been both proactive and reactive. Proactively, community colleges have attempted to create a trained workforce for anticipated new technologies locating in their geographic catch basin as well as in preparation for the adoption and implementation of growing international standard in many industries (Committee on Science and Technology, 2007; Kasper, 2003; MacAllum, Yoder & Poliakoff, 2004; C. L. Marshall, Iowa Lakes Community College, personal communication, October 2, 2006; The NEW Commission on the Skills of the American Workforce, 2006). Reactively, they have introduced and eliminated programs and methods in response to recognized changes in the local business community and student demands (LaLonde, 1995).

Since the early 1970s, U.S. institutions of higher education have been increasingly aware of a need to include issues of diversity and cultural understanding into the liberal

arts curriculum. This awareness tended to focus primarily on domestic social equity issues and less on global perspectives and understanding (Bruch, Higbee & Lundell, 2002). Businesses also recognized the need for these soft skills as an increasingly diverse workforce entered into the information age and collaborative teamwork was stressed in the workplace (Overtoom, 2000; Secretary's Commission on Achieving Necessary Skills, 1991; USF Globalization Research Center, 2004). Presently, a large number of employment agencies, associations, and licensing examinations include diversity and collaborative work skills in their criteria for success (Hake, 2007; National Work Readiness Council, 2007). Further, within the technical and occupational programs, a trend toward a new vocationalism has attempted to increase soft skill integration into their programs, with a focus on problem solving, collaboration, communications skills and diversity awareness (Green & Olson, 2003).

For the past decade, universities and particularly Colleges of Business have been studying the impacts of globalization on business. Their studies have examined the changing skills required by workers in the globalized economies, emphasizing regional or national industry trends and on the changing interpersonal needs of senior business managers. To date, few studies have been published on the changing social/interpersonal skills needed by entry level employees or new line managers in order for businesses and individuals to excel in the new globalized economy. What has been written has concentrated on large corporations, university instruction and business majors (Kedia & Daniel, 2003; Bikson & Law, 1994).

A nation-wide Fortune 500 study (Kedia & Daniel, 2003) examined university business majors to determine whether corporate leaders were satisfied with

international education components of existing collegiate, corporate and governmental business programs. The study identified six international skill sets: country socio-economic/political knowledge, appreciation of cross-cultural differences, a global perspective, understanding of local markets/business practices, international work experience, and foreign language skills. Further, the 111 respondents reported a strong demand for the skills and some difficulty in finding or retaining managers with the desired international skills (Kedia & Daniel, 2003).

The Kedia and Daniel (2003) study was not the first of its type. In 1994, the RAND Institute on Education and Training (Bikson & Law, 1994) published a case study focusing on expanding cross-cultural competence requirements; in 1997 the Center for International Business Education and Research (Moxon, O'Shea, Brown & Escher, 1998) presented the results of a survey study that reported an increased need for international skills; and in 2000 John Levin's multiple case study found the growing demand for new economy skills. Following the Kedia and Daniel 2003 report, the discussion turned toward creating a clearer definition of international skills and the related cross-cultural competence and global competence (Kedia & Daniel, 2003; Reilly, 2004; Sizoo & Serrie, 2004; Hunter, 2004).

Purpose

The primary purpose of this study was to determine if there is an educational need for international skills for sub-baccalaureate technical/occupational employees. This needs assessment was conducted to determine whether international skills were considered important for employment entry or movement, and if considered important, then to determine where businesses have been obtaining training in international skills.

In addition, this study garnered business recommendations for the improvement of international skills education in community college occupational and technical programs.

Significance of the Study

With an on-going focus on large corporations, university instruction, and business majors, to date there had not been a systematic needs assessment for international skills to be taught in community college occupational and technical programs. Without this assessment, community college leaders and faculty have not been able to determine whether they are adequately preparing students in these skills to be successful in tomorrow's fast paced, mobile and integrated global workforce.

The literature has told us that every category and aspect of U.S. business has been affected by globalization, that businesses have been interacting across cultural and national boundaries at an increasing rate and that our citizenry has been growing more ethnically and culturally diverse. We also know that our community college systems have had a mission to offer education and training across the technical and occupational spectrum and to work to provide businesses the skilled workers they need.

In anchoring this study in the literature, the findings of this study were compared to the results of an earlier national study of Fortune 500 MBA program graduates to determine whether the national results are generalizable to a single economic region with emphasis on community college occupational and technical students.

Framework

The Needs Assessment Planning process outlined by William Rothwell & H. C. Kazanas (1998) acted as the educational template for this study. Focused on ensuring the performance requirements of the employment positions are satisfied, this process acted to limit the study to the specific international skill sets outlined by the Kedia and Daniel (2003) study.

The theoretical framework of this study was based in systems theory (Appendix 1). In a world of global change (globalization), students go through an educational process and gain knowledge, skills and attributes which are then utilized in business and industry. Due to the dynamics of change, the needs of students, the available knowledge, skills and attributes, and the needs of business and industry continually transform. Needs assessments are performed by business and industry in order to identify educational needs in their current and perspective employees. These identified needs are then codified into educational programs and presented to students to mitigate the shortcoming consequences. The closed loop nature of the framework acknowledges that the global transformation leads to a need for lifelong learning.

Research Questions

The specific research questions for this study are to determine:

1. What international skills do surveyed U.S. business and industry executives believe are important for the sub-baccalaureate technical and occupational employees that they hire and promote?

2. How do surveyed U.S. business and industry executives engage their companies' sub-baccalaureate technical and occupational employees in training programs to develop international skills?

3. In what ways do surveyed business and industry executives think U.S. community college technical and occupational degree programs should change with respect to their international skills objectives?

Delimitations and Limitations

Delimitation:

The study's population for the survey was delimited to businesses with five or more employees and a mailing address within the Tampa Bay Economic Zone as listed in the Reference USA database. From this population, a random sampling of 1,920 businesses was asked to participate in the study and 145 businesses responded. The study's business focus group consisted of a convenience sample of 12 business managers from the Tampa Bay Economic Zone and the study's community college focus group was comprised of a convenience sampling of 4 community college administrators or community college technical/occupational instructors from the Tampa Bay Economic Zone.

Limitations

This study was limited by a number of conditions. The entire study was conducted in the Tampa Bay Economic Zone with no attempt to determine if the internationalization or composition of companies within the zone were comparable to other areas of the world. This study did not confirm that sub-baccalaureate technical/occupational employees had attended community colleges within the Greater Tampa Bay Economic Zone. The data in the Reference USA database that were used

in this study were not independently verified for accuracy by the author. The survey instrument provides only individual managers' perceptions of the demographics of the company and the international skills needed by technical/occupational employees and should not be construed as a complete gap assessment. The surveys that were received were a convenience sampling of the surveys mailed, and the resulting 145 respondents provided a confidence level of only 76% with a margin of error of +/- 5%. There was no attempt by the author to provide surveys in languages other than English. The Focus Groups were convenience samples solicited by a professional from the Chamber of Commerce and by a senior community college administrator. The Community College Focus group consisted of only four members which limited its representation and may have effected the group discussions. The analysis of the focus group discussions were qualitative in nature and consequently, do not attest to meet the rigor of qualitative research.

Definition of Terms

A global perspective: An ability to consider the interdependence of actions across the planet. This perspective allows individuals to consider and integrate the impacts of international actions on the local environment, as well as the impacts of local actions on the rest of the world.

Appreciation of cross-cultural differences: An understanding that there are cultural differences throughout the U.S. and the world and that these differences are opportunities for business growth and enriched economic relationships through the leveraging of multiple perspectives and adaptability.

Foreign language skills: Degrees of understanding of a written or spoken language, not English, as well as the degrees of ability to concisely translate the intent and meaning of non-English languages between each other and with English.

International work experience: An individual's history of conducting business activities outside of the United States. This activity could be classified as being physically posted outside of the U.S. and living for a period of time on foreign soil, or as occupying a position in the U.S. that requires direct work in the international arena.

Knowledge of a country's socio-economic and political structures: Awareness of the social, economic and political structures and institutions within foreign countries that are or may be of business interest to your firm.

Line Personnel: Managers or employees working in primary revenue generating units in support of the organizational mission.

Staff Personnel: Managers or employees working in positions that are ancillary to the primary revenue generating units of an organization.

Technical/Occupational Programs: Community college programs with a focus on workforce development versus programs intended to provide students with general education requirements for acceptance into a four year program.

U. S. Businesses: Businesses that are registered within the United States and with mailing addresses within the U.S. These businesses may be U.S. or foreign owned.

Understanding of international technical/occupational standards: Knowledge and understanding of accepted international standards within one's technical/occupational field.

Understanding of local market/business practices: An understanding of the actual way business is successfully conducted in country/cultural settings of interest.

Chapter Summary

Chapter One presented a brief overview of what is known about the need for international skills in business and provided a statement of the purpose of the study to further understand the relationship. There was a short discussion about how the history of technical/occupational programs in community colleges has evolved over time and an outline of the research that has been conducted on the need for international skills to be taught in the United States. The primary purpose of this study was presented: to determine whether business leaders believe international skills are important for sub-baccalaureate technical/occupational employees. Further, a second purpose presented was to determine how businesses currently train employees in international skills. The third purpose presented was to explore the relationship between the community colleges and local businesses as it relates to international skills education. Lastly, the significance of the study section discussed the need for community colleges to provide businesses with employees that have the necessary international skills for the U.S. economy to function effectively in the evolving globalized world.

Chapter Two

Review of the Literature

Chapter Two presents a review of the relevant literature regarding the teaching of and the perceived needs for international skills in the workplace. Brief overviews of the effects of globalization on community colleges and international skills are presented. A review of international skills literature as it relates to this study is also presented. This review is followed by a discussion of community college technical and occupational programs as they relate to this study and a discussion of the framework and theoretical underpinnings of the study.

Initial computerized searches on Wilson Omni File, EBSCO Host Research Databases and ProQuest using the headings of international skills, globalization skills, international competence or global competence resulted in more than 7,000 publications. Searches using the Boolean “AND” term for international skills + training, global skills + training or global competence + education and cross-cultural competence identified over 1,300 articles. A review of the references within these located articles resulted in many additional relevant sources. Additional resources were provided by subject matter experts within the field regarding globalization, international skills and technical/occupational programs within community colleges.

Globalization and International Skills

Globalization

Globalization is a broad controversial concept that speaks of the rapid interactions of cultures across distances. Broadly stated, globalization concerns itself with the ways and means by which ideas, people and goods are transferred from one place to another and the resulting changes that seem to occur as a result of these movements. Researchers have discussed these changes from structural, political, human and symbolic frames of reference (Boleman & Deal, 2003; Coatsworth, 2004; Raby, 2000) and opined optimism and concerns about the intended and unintended consequences of these interactions (Raby, 2000; Tierney, 2004).

Community colleges have been impacted by the effects of globalization both administratively and academically (Levin, J. S., 2002; Tierney, 2004).

Administratively, the effects have been instrumental in increasing world-wide competition between educational institutions, ushering in increased needs for economizing and a more business-like approach to college affairs, increased accountability, an increased need to internationalize the campus, an increase in the potential student base and a decrease in insularity within the college community.

Academically, globalization has increased the amount and speed of information transfer, has allowed academics to expand their reach beyond the classroom walls, has made it more important for most professors to stay up-to-date within their field, has changed student demographics and needs and has threatened many traditional courses and teaching methods with obsolescence (Currie & Subotzky, 2000; Levin, 2000; Suarez-Orozco & Qin-Hilliard, 2004).

International Skills

As the impacts of globalization have been recognized, there has been a growing awareness that there may be a need for a different skill set to allow workers in a global economy to perform more effectively. Various researchers have coined terms such as global skills, global competence, cross-cultural competence and international skills to describe the phenomena and various researchers have provided overlapping skill sets (Appendix 2).

First introduced into the literature as cultural competence in 1988 by Paul Pedersen, this phenomenon has since entered the lexicon of virtually every nation and human enterprise. Based on a general belief that individuals and systems should acknowledge and try to contextually accommodate for the differences between sub-category of human society, researchers have studied the concept and its impacts from individual (behavioral, affective and knowledge) (Harper, 2006; Sue, 2001), cultural (religion, business, family, government, education) (Bikson & Law, 1994; Diller & Moule, 2005; Hampden-Turner & Trompenaars, 2000; Ogbu, 1981) and global (migration) (Bean, 2006) perspectives. Levels of competence are generally determined by the degree of understanding, clarity of communication and effectiveness of interactions with people or systems across cultures (U.S. Department of Defense, 2006). It remains a work in progress.

A review of the generalized skill sets in Appendix 2 reveals commonalities. All of the skill sets included a need to perform tasks within a mixed cultural setting (Bikson & Law, 1994; Deardorff, 2006; Hunter, 2004; Kedia & Daniel, 2003; Lambert, 1996; Moxon, O'Shea, Brown & Escher, 1998; Reilly, 2004; Rollins, 2005; Sizoo & Serrie,

2004; USF Globalization Research Center, 2004; Zeszotarski, 2001); all but five included the need to demonstrate a global perspective (Bikson & Law, 1994; Deardorff, 2006; Hunter, 2004; Kedia & Daniel, 2003; Rollins, 2005; Zeszotarski, 2001); all but five emphasized the need to have knowledge of other political or economical systems (Bikson & Law, 1994; Hunter, 2004; Kedia & Daniel, 2003; Lambert, 1996; Moxon, O'Shea, Brown & Escher, 1998; Rollins, 2005; Sizoo & Serrie, 2004; Zeszotarski, 2001); and all but four highlighted the need to appreciate cultural differences (Bikson & Law, 1994; Hunter, 2004; Kedia & Daniel, 2003; Lambert, 1996; Sizoo & Serrie, 2004; USF Globalization Research Center, 2004; Zeszotarski, 2001). Additional review indicates that eight of the skill sets highlight a need for more than one language (Bikson & Law, 1994; Hunter, 2004; Kedia & Daniel, 2003; Lambert, 1996; Moxon, O'Shea, Brown & Escher, 1998; Reilly, 2004; Rollins, 2005; USF Globalization Research Center, 2004). Other skills described by four or more authors included appreciations of geographic, religious and sociological differences/similarities, the ability to understand self in a multicultural context and an understanding of business practices in other nations and cultures (Bikson & Law, 1994; Deardorff, 2006; Hunter, 2004; Kedia & Daniel, 2003; Lambert, 1996; Moxon, O'Shea, Brown & Escher, 1998; Reilly, 2004; Rollins, 2005; Sizoo & Serrie, 2004; Zeszotarski, 2001).

In 2003, Kedia and Daniel reported findings from their study designed to determine which international skills senior Fortune 500 business executives considered important for new and subordinate business school graduates (Kedia & Daniel, 2003). The study was based on an earlier work (Moxon, O'Shea, Brown & Escher, 1998) that identified cross-cultural skills, foreign language skills, country specific knowledge,

international business experience and interpersonal skills as having some to great importance to a cross-section of small to large businesses with an international presence. Kedia and Daniel, using subject-matter experts refined the skills list to: country socio-economic/political knowledge, appreciation of cross-cultural differences, a global perspective, understanding of local markets/business practices, international work experience and, foreign language skills. Their 11% return (n=111) of usable surveys indicated that the international business community believed that all six of the listed international skills were of some or of great importance for both professional staff and line management personnel (Appendix 3).

Other explorations regarding the topic of international skills have been conducted. For example, an earlier study by RAND Corporation (Bikson & Law, 1994) approached the issue of international skills to discover human resource implications. Commissioned in support of college planning and placement and corporate human resource professionals, the study examined human resource policies and curriculum implications of a globalized workforce. The case study consisted of interviews and group discussions in 16 multinational corporations and 16 universities from four U.S. urban environments. Selected business professionals included senior management, senior human relations professionals, senior line management and a representative entry level professional with a baccalaureate degree. University participants paralleled businesses with senior decision-makers, placement specialists, senior faculty and graduating students. Bikson and Law (1994) identified domain knowledge, cognitive, social and personal skills, prior work experience, on the job training and cross-cultural competence as the general categories of desired attributes.

Of these categories, only cross-cultural competence was identified as a critical new requirement for multinational corporations. Cross-cultural competence was defined as including an international perspective to business, an appreciation of the differences between cultures, an understanding of one's own culture, an understanding of history, geography, and politics from different cultural contexts, an understanding of local customs and language, and the ability to work within cross-cultural groups.

Convening subject-matter experts, Mary Reilly (2004) created a tentative list of competencies and skills for international business professionals. Using a stratified convenience sampling of 548 international business managers, human relations specialists, university academicians and recent business graduates, the sample garnered a 13% return rate that heavily weighted the academicians (71%). The responses rated the 160 competencies on a 5-point Likert-like scale. Fifty-nine items received an average rating of very important or important. These fifty nine items are combined under the categories: appreciation of the differences between cultures, understanding of local markets/business practices, cultural socio-economic/political knowledge, understanding of one's own culture, ability to work within cross-cultural groups, a global perspective and foreign language skills.

Using a mixed three round Delphi technique with 18 panelists and a survey administered to 141 international educators and 42 transnational human relations directors, Bill Hunter (2004) focused on capturing a working definition of global competence (87% agreement) and reaching a consensus on the merit of suggested knowledge, skills and attitudinal components in the defining of a globally competent person. The results consisted of 19 items summed up to include: self awareness of own

culture, ability to compete across cultures successfully, broad cultural/social/linguistic/historic/current knowledge, foreign language skills, native experience in other cultures, a global perspective and openness, and awareness and respect cultural diversity and pluralism. It is worth noting that foreign language skills were ranked between agree and neutral and thus was only marginally included in the above list.

Focusing on the need to learn cross-cultural skills through intellectual and experiential means, Sizoo and Serrie (2004) concluded that cross-cultural differences should be managed at three levels: self in response to the alien culture, relationships within an alien culture, and organizational structures and functions in concert with an alien culture. In learning knowledge and skills, it was envisioned that the individual would demonstrate an appreciation of cross-cultural differences, be capable of adapting to a different cultural environment, manage cross-cultural differences at the interpersonal level, demonstrate country geo-socio-economic/political knowledge, local markets/ business practices, and demonstrate the ability to work within cross-cultural groups.

International Skills in Business

Technological advancements and the rapid transport of goods and ideas are forcing businesses to reconsider the skill sets needed by employees. Beset with increasing competition and increasing interdependence with far-flung associations as well as an increasingly diverse client population, business owners and perspective employees are expending considerable resources to improve the skills that will increase the chances for financial success. Many studies list international skills of varying

importance for success. A review of the international skills identified by Kedia and Daniel (2003) highlights this observation (Appendix 2).

From the literature, business expects employees to be well grounded in the technical aspects of their chosen field, although the demand for competence in current international standards varies by industry and company (Laanan, Compton & Friedel, 2006; Moxon, O'Shea, Brown & Escher, 1998). This variance by industry and company holds true for the need to understand local markets/business practices outside of the U.S. (Moxon, O'Shea, Brown & Escher, 1998). An appreciation of cross-cultural differences, to include the celebration of diversity, cross-cultural competence and cultural knowledge, are also considered important business attributes (Bikson & Law, 1994; Committee for Economic Development, 2006; Hunter, White & Godbey, 2006; Kearney, 2004; Moxon, O'Shea, Brown & Escher, 1998). Possessing a global perspective, to include global knowledge and a global mindset, is identified as important, however one study finds it only marginally important (Hunter, White & Godbey, 2006) while another study deems having a global perspective of significant and growing importance (Moxon, O'Shea, Brown & Escher, 1998). International work experience is of considerable importance to businesses (Bikson & Law, 1994; Commission on International Education, 1998; Committee for Economic Development, 2006; Kearney, 2004; Moxon, O'Shea, Brown & Escher, 1998; Stanley Foundation, 2000), but there is a concern that college/university study abroad programs and other programs that do not contain prolonged immersion experiential components are inadequate (Sizoo & Serrie, 2004). Foreign language skills are also considered an important international skill, but there was a perception that college/university

programs are focused on literature and not on a cultural integration of language which would be useful in the workplace (Bikson & Law, 1994; Committee for Economic Development, 2006; Hunter, White & Godbey, 2006; Kedia and Daniel, 2003; Moxon, O'Shea, Brown & Escher, 1998).

Community College Technical and Occupational Programs

Community college technical and occupational programs are important to individual success, community growth and national prosperity. Currently, almost half of all community college students are enrolled in technical and occupational courses, over 90% of high school students take technical and occupational courses, and three-fourths of all U.S. employees are employed in mid-skill positions typically served by technical and occupational programs (Association for Career and Technical Education, 2006; Boggs, 2007; Laanan, Compton, & Friedel, 2006). These programs have been essential to retraining from old industry skills and in filling both traditional and emerging high skill jobs in local economies (Dellow, 2007; Fahy, 2005; Green & Siaya, 2005; Jacobs, 2001; Jacobs & Voorhees, 2006; Laanan, Compton, & Friedel, 2006). The relationship between these technical and occupational programs and the industries that they support has not been without tension.

Torn between its numerous missions and philosophical underpinnings, community colleges have struggled to maintain the appropriate balance between competing entities while negotiating changes in legislative and financial support. Over the decades numerous federal acts, to include the Smith-Hughs Act (1917), the Servicemen's Readjustment Act (1944), the Manpower Development Training Act (1962), the Vocational Education Act (1963) with various amendments and

reauthorizations, the Carl D. Perkins Vocational and Applied Technology Act (1984) with various amendments and reauthorizations and the Workforce Investment Act (1998), have provided national support for state and local initiatives. These initiatives have long provided the mandate for vocational and occupational programs within the community college systems. Common to all of these acts has been a requirement that vocational and occupational training be geared toward creating a local workforce with skills to enhance community economic development. Beginning in the 1990's, financial support for vocational and occupational programs increasingly shifted to the students and the industries that needed the skilled workers (Committee on Science and Technology, 2007; Hauptman, 1997). More programs are being co-sponsored by specific local businesses and industries with vested interests in proprietary technologies and a need for technically trained or credentialed operators, while many traditional programs are being scrapped due to small census or a lack of financial support.

The interrelated effects of globalization, the new vocationalism and a growing capitalistic approach to education are changing community college technical and occupational programs. Community colleges need to economize due to increased competition from other providers, an increased student body and reduced governmental financial support (Hauptman, 1997). Local, state and national political and business leaders look to the community colleges to provide the mid-skilled workforce with the technical and soft skills necessary for lifelong learning within a viable career path while simultaneously insisting on economizing and the maintenance of other community college missions (Levin, 2000). Technical and occupational program students want to

be taught work related skills that will improve their employability, advancement opportunities and make them more competitive in the global economy (Ryland, 2000).

The new vocationalism highlights the need for learning soft skills within technical and occupational programs. This emphasis stems from an underlying principle of the new vocationalism that students need to have the capability and expectation of life-long learning, a holistic understanding of their chosen field and the skills needed to adapt to the ever-changing global economy (Bragg, 2001; Townsend, 2001). In support of this recognition, community college technical and occupational programs have been encouraged to increase general education requirements within programs and to include the learning of international skills needed by business (Townsend, 2001; Dellow, 2007).

Theoretical Framework

Career Development

Central to an understanding of the new vocationalism and the growing awareness of the increased need for business soft skills is the career development process. This process, encompassing enhancing self-awareness, environmental awareness and career decision making, consists of behavioral, attitudinal and knowledge factors associated with individual as well as institutional responsibilities (Tuckman, 1974). Influenced by both career paths and biological age, the career development processes of both individuals and institutions are affected by far-reaching environmental factors such as globalization (Super & Hall, 1978) which change the nature of society, industry, individual jobs and individuals. Globalization, with its increased and accelerated interactions with diverse groups and ideas has affected the

very fabric of the U.S. population and how that population works, plays and thinks (Friedman, 2005).

Needs Assessment

In the review of literature, evidence was presented demonstrating that many business leaders of international corporations want business school graduates to possess various international skills, but there was little research to determine whether this need for international skills has reached the mid-level technical and occupational employees or is needed by local and national businesses.

To recognize an educational need, it is commonly accepted that a needs assessment must be conducted. The needs assessment identifies differences between what students currently demonstrate, possess or know, and desired knowledge, attitudes or capabilities (Queeney, 1995). The establishment of desired end states was the focus of this study. Within this framework of goal setting, determining needs and outlining educational purposes (Posner, 1998), societal stakeholders within the U.S. identified a generic need for international skills in order for U.S. businesses to thrive in the globalized world (Hunter, 2004; Kedia & Daniel, 2003; Levin, 2000; O'Shea, Brown & Escher, 1998; Reilly, 2004; Sizoo & Serrie, 2004). Focusing on the societal needs assessment of this study, the institutional stake holders, in the form of business leaders, were asked if they believed this need for international skills had reached down into business organizations to the level of technical and occupational employees with sub-baccalaureate degrees. Their responses, gathered through survey and focus group designs, provided empirical and judgment assessments through observation, evaluation

and discussion with stakeholders that possess expert knowledge (Cervano & Wilson, 2006; Grier, 2005).

In particular, the needs assessment planning process outlined by Rothwell and Kazanas (1998) acted as the educational template for this study. As part of the process to identify skills needed in task performance, it is common for supervisors to provide input into the needs assessment. This input helps identify the importance and relevance of skills to the successful performance of tasks and sub-tasks required or desired for a particular job or class of jobs. In this study, company leaders were asked to provide input as to the importance and relevance of international skills to the successful performance of tasks and sub-tasks required or desired for employees filling occupational and technical positions within the organization. The international skills assessed were from the Kedia and Daniel (2003) study.

Systems Theory

Systems theory provided the framework for this research project (Banathy, 1991). Systems theory focuses on the dynamic interaction of parts within a larger system and recognizes that most social systems are inherently open to outside influences (Bailey, 1994). This study was conducted within the context of educating and training students for employment purposes within a globalized world (Appendix 1). Within the system, students include all current or perspective employees of business that are engaged in formal or informal technical/occupational training or educational endeavors. These training or educational endeavors are conducted in public and private institutions, to include community colleges. In the process of the training or educational endeavor, students gain knowledge, skills and attributes that enhance their

abilities to be productive employees for business and industrial employers. Business and industry includes all companies and organizations that provide public or private services or products for consumption or market share. They are the employers of the students or former students, and as such, have a need to ensure that the employees that they hire, retain and promote, have and/or acquire the knowledge, skills and attitudes needed to enhance business success in meeting or exceeding the organizations mission, vision and goals. The identification of business training and educational needs is an integral part of the needs assessment process. Once business needs are formally or informally identified, an assessment is conducted to determine if there is a difference between the knowledge, skills and attributes of current and perspective employees and the needs of the business. This study focused on the business and industry part of the system and asked business managers whether they have needs for a defined set of international skills, and then asks them to identify any perceived shortcomings in the current or anticipated future international skills exhibited by technical/occupational sub-baccalaureate employees. This model is an open system, set at the macro level. When this framework is focused on a given geographic area, there is a recognized growth in the “openness” of the system as students, businesses and industries enter and leave the geographic area for economic and educational opportunities.

Chapter Summary

Chapter Two has provided a brief overview of the impacts of globalization on the community college and discussions on the definitions of international skills. A review of literature pertaining to studies on international skills was presented and discussed which highlighted the lack of research on the need for technical and

occupational employees to demonstrate international skills. An introduction of needs assessments followed which clarified the scope of the data gathering. Systems theory provides the theoretical basis for determining whether there is an unfulfilled need for businesses to have technical and occupational employees with international skills. This framework is a holistic model in which a survey can be conducted at a particular point.

Chapter Three

Method

Chapter three presents the method used in this study. Included are the study design, setting, sampling, instrumentation, procedure and the data analysis plan.

Study Design

This needs assessment study is a survey design with follow-on focus groups. Survey participants were randomly selected from the population. All prospective participants were mailed a pre-survey alerting postcard, the survey with cover letter and stamped return envelope and a post survey reminder postcard (Babbie, 2001; Dillman, 2000). A convenience sample of business leaders and a convenience sample of community college leaders were convened as focus groups to discuss the survey results. The study design blinded the investigator to the survey respondent and corresponding business names.

The study provided an opportunity to conduct a systematic needs assessment of specific business educational requirements. Further, the study targeted the resulting recommendations directly to the supporting community colleges for consideration in occupational/technical programs. This multi-method design included both a mixed quantitative-qualitative questionnaire and qualitative in nature focus group processes to provide depth and context to the questionnaire findings (O'Brien, 1993; Teddlie & Tashakkori, 2003). The questionnaire "The Olney Survey of U.S. Business Needs for Technical/Occupational Employees with International Expertise" (Appendix 4) was the

instrument mailed to businesses in this study. This type of comprehensive approach was essential in order to understand the effects of globalization on the need for international skills instruction in community college occupational/technical programs.

Setting

The research took place in the Tampa Bay Economic Zone, defined by the State of Florida to encompass eight Central Gulf Counties (Citrus, Hernando, Pasco, Hillsborough, Pinellas, Polk, Manatee and Sarasota) as well as the campuses of six Community Colleges (Central Florida, Pasco-Hernando, Hillsborough, St Petersburg, Polk and Manatee). The Tampa Bay Economic Zone is an eight county area in west central Florida that borders the Gulf of Mexico and is pierced by Interstates 4 and 75. Containing a labor force of about 2 million, over 163 foreign affiliated companies and over 64,000 businesses, the zone is positioned to take advantage of the largest sea port in Florida, an international gateway to every continent, and a vision of massive international trade expansion (Enterprise Florida, 2007; Reference USA, 2007; Tampa Port Authority, 2007). The area employs increasing numbers of international workers, has increasing foreign investment, and has garnered increases in international trade as a percentage of total trade. The business community has reported a need for increased cultural sensitivity and the emergence of globalization as a core competency (USF Globalization Research Center, 2004).

The community colleges are spread throughout the zone and are within and around the three contiguous metropolitan areas of Tampa-St. Petersburg-Clearwater, Lakeland-Winter Haven, and Brandon-Sarasota-Venice. Their head counts in 2006 ranged from 5,825 (Central Community College) to 24,558 (St. Petersburg College)

and a total headcount of over 75,000 students. The students are predominately White, but also include ethnicities of Black (13%), Hispanic (11%) and Asian (3%). Over 1.5% of the 75,000 students are listed as Alien Residents. The community colleges offer programs leading to degrees in Arts and Science, Associates of Arts, Associates of Applied Arts, Associates in Applied Science and limited Bachelors degrees. Programs leading to certificates and diplomas include Applied Technologies, Advanced Technical, College Credit, Post Secondary, Vocational, Technical Preparation and Workforce (Florida Department of Education, 2007; Tampa Bay Partnership, 2008).

There are about 4 million residents in the Tampa Bay Economic Zone. The adults of this population are predominately White, 13% are Hispanic, 10% Black and 2% of Asian descent. Eight-one percent have a high school degree or higher, 29% have completed some college but have not attained a baccalaureate degree, over 160,000 people are enrolled in degree granting institutions and 11,000 in career development institutions. Twenty percent of the total population is between 18 and 34 years of age. The business community has experienced a 12% growth in non-farm jobs from 2000 to 2007 (national = 4.4%), a 14% growth in the labor force (national = 7.4%) and a positive migration that is expected to contribute to an 8.73% growth in population in the next 4 years. With eight Fortune 1000 company's headquarters and a large presence in professional and business services, retail trade, education, health services, government and leisure and hospitality businesses, the area has been touted as the south's Wall Street. The area boasts two seaports with deep water channels, proximity to the Panama Canal, new container terminals, gantry cranes and expansion capability. The ports are connected to a state-of-the-art rail to truck distribution center located in

Polk County and boast handling over 48 million tons of cargo and a million passengers in 2006 (Florida Department of Education, 2007; Tampa Bay Partnership, 2008).

Sampling Method

Business Sampling

To capture a complete listing of the population, the researcher used the database of Reference USA (2007). This internet-based reference service is designed for use as a reference tool in libraries and contains detailed information on more than 14 million U.S. businesses. Reference USA uses public documents, directories, annual reports, U.S. Postal Service records, government databases, Securities and Exchange Commission data and direct contact with businesses to maintain the accuracy of its files. Records are matched and cleaned (Reference USA, 2007).

Based on the size of the population identified by the author in a 2006 pilot study of this research within the eight county Tampa Bay Economic Zone, it was expected that a database of about 64,000 businesses with five employees or more would be identified. A minimum of five employees was chosen to reduce the burden on small owner/operator businesses, lack of training plans and historically poor return (L. Hanson, Business Intelligence Officer, Tampa Bay Partnerships, personal communication, April 30, 2007). Demographic information about the businesses included business names, addresses, NAICS codes, sales incomes, employee sizes and the names and titles of principles of each business.

Once the entire database was downloaded into an Excel file, the businesses were numbered starting with the number one. The study's sample was selected from the

population database using a random number generator and identifying the corresponding business.

The researcher's 2007 pilot study had a return of 20%. With random sampling, independent observations and using the Central Limits Theorem $\bar{\sigma}_x = \frac{\sigma}{\sqrt{n}}$, this researcher intended to achieve results with 95% certainty (+/- 5%). This required a return of 384 business surveys (Creative Research Systems, 2007). To gain 384 returns with a 20% return rate as achieved in the pilot study, a random sampling of 384 times 5 or 1,920 businesses was selected. Results with 95% certainty (+/- 5%) are considered standard practice for educational research (J. Kromrey, personal communication, November 27, 2007).

Focus Group Sampling

Solicitation of the business Focus Group was accomplished by Ms. Gloria Anthony, Vice President of Workforce and Community Development for the Greater Tampa Bay Chamber of Commerce as a convenience sampling. Emails containing an outline of the research project, an explanation of the purpose of the focus group, and a copy of the consent form were sent to members of the Chamber. Solicitations requested five to ten business participants to meet at the Chamber offices for about 90 minutes. Prospective members electronically confirmed their intent to attend to the Chamber point of contact. Twelve business members from the greater Tampa Bay economic zone agreed to participate and signed the informed consent form. The group consisted of five managers, four vice presidents, one supervisor, one director and one staff development officer. They were employed by four financial institutions, one real

estate company, one human resource company, and engineering/construction firm, a manufacturing company, a marketing company, a consulting firm and a hospitality firm (Appendix 5).

The Community College Focus Group was a convenience sample convened by Dr. Michael F. Brennan, Director of International Education for Hillsborough Community College (HCC) in Florida. Emails containing an outline of the research project, an explanation of the purpose of the focus group and consent form were sent to prospective members filling positions as community college administrators and technical/occupational educators in the greater Tampa Bay area. Solicitations requested five to ten participants to meet at the Hillsborough Community College Ybor City Campus for about 90 minutes. Prospective members electronically confirmed their intent to attend to the HCC point of contact. Four education professionals from the greater Tampa Bay economic zone agreed to participate and signed the informed consent forms. The group consisted of one academic dean, one member who was both a professor and an academic program manager, a technical programs director and an international business instructor (Appendix 5).

Protection of Human Subjects

This study was reviewed and approved by the University of South Florida Human Subjects Institutional Review Board and all elements of this study were in compliance with their guidelines and stress the protection of research participants (Appendix 6). Safety and security of business and personal information was maintained. The survey cover letter (Appendix 7) stated that information collected would not be attributed to specific businesses or respondents. Surveys did not contain

business names or the name of the respondent (Babbie, 2001). The researcher did not place business names on the stamped, return addressed envelopes provided to the businesses. Members of the focus groups signed consent forms indicating that they acknowledge that the information collected and that statements would be analyzed but not attributed to specific members in publications (Appendix 8).

Instrumentation

This study utilized two instruments. The instruments were: The Olney Survey of U.S. Business Needs for Technical/Occupational Employees with International Expertise (Appendix 4); and the Focus Group Question Outline (Appendix 9).

Instrument Development

The Olney Survey of U.S. Business Needs for Technical/Occupational Employees with International Expertise

Reviewing the literature, the author was drawn to the Kedia and Daniel (2003) study due to its focus and practitioner orientation. Ben Kedia and Shirley Daniel created the *U.S. Business Needs for Employees with International Expertise* questionnaire in order to ascertain the businessman's perspective on specific entry level management and professional staff skills requirements. Their 28 question instrument was broken into four subtopics: Company Profile and International Activity; Staffing Needs and Patterns; International Training Programs, and; Respondent Information. After gaining permission to use the Kedia and Daniel questionnaire (B. Kedia, personal communication, October 26, 2006) (Appendix 10), the researcher began developing a pilot questionnaire entitled "U.S. Business Needs for Technical/ Occupational Employees with International Expertise" (Appendix 11) for this new population.

Using Don Dillman's (2006) survey design text for guidelines to develop the pilot instrument, the author presented the developing questionnaire to subject area specialists, beginning with doctoral students, for review and comment. These repeated reviews provided insights into usability and structure. According to Fuller, Edwards, Vorakitphokatorn and Sermsri (1993), when adapting a survey instrument to a new populations, the researchers can use focus groups to improve the validity and interpretations of the new instrument. Following the peer reviews, the study design and draft questionnaire were presented at the Council for the Study of Community College Research Council (CSCC) annual meeting (Olney, 2007). This round table presentation resulted in further suggestions for improvement and an endorsement of the study itself. Attendees, including a past president of the CSCC, stated that this was a necessary and timely step in the study of community colleges and encouraged the author to expand the study nationwide. Over the next several months the instrument was discussed with and reviewed by various experts in the fields of business measurement, international studies and business management in order to minimize the limitations of the survey design (Mann, 1998). These advisors (Appendix 12) brought further focus to the questions, provided feedback on the readability and interpretability of the findings and provided insights into surveying businesses successfully. From these reviews the survey subtopic International Training Programs was expanded to ensure that Community Colleges were represented in the possible answers to appropriate questions and the additional international skill of Understanding the international technical/occupational standards was identified. Concurrent with these reviews, the author compiled the

population database using Reference USA (2007) for the greater Tampa Bay economic zones (Enterprise Florida, 2007).

Next the author solicited three subject matter experts to evaluate the validity of the instrument (Crocker & Algina, 1986). These experts had taught at the community college, had worked in community or business development, had experience working with diverse populations, and felt that they had a relatively good grasp of the Tampa Bay business community (Appendix 12). These experts were chosen due to their broad backgrounds and their familiarity to the target audience. Their input was essential in ensuring that the author was not institutionally biased or blind to issues that may affect the business community. They provided a needed perspective to the orientation and design of the survey (Guba & Lincoln, 1982). Utilizing two rounds of evaluation, all three experts were asked to evaluate the cover letter for clarity and each survey question for relevance and clarity. After the first round of evaluation, questions that were not unanimously considered appropriate and clear were edited or removed. After the second review, all questions were scored as relevant and clear by all evaluators (Appendix 13). In addition, the subject matter experts were asked to determine which survey questions measured which research questions. All three experts were in agreement on the alignment of survey questions with research questions (Appendix 13) and the pilot instrument entitled *U.S. Business Needs for Technical/Occupational Employees with International Expertise* was finalized (Appendix 11).

Following approval of the IRB by the University of South Florida (Appendix 14), the questionnaire with cover letter and return envelope was mailed to 100 randomly sampled businesses from the population of 64,000 businesses in the 8 county

Tampa Bay Economic Zone. After 7 and 14 days, follow-up postcards were sent to each recipient to improve the response rate (Babbie, 2001). After 35 days, 21 percent had responded with 20 usable questionnaires. One returned survey was blank. An anticipated return rate of 20% was used for this study.

Using goodness-of-fit chi-square (Glass & Hopkins, 1996), a review of the population, random sample and respondent data revealed that there are no significant differences between proportions (Appendix 15) for the number of business employees, types of businesses and the sales in dollars demographics. The pilot sample appeared to be a fair reflection of the population for these collected demographics.

Review of these 20 datasets indicated no confusion with the cover letter or survey instructions, and all questions appeared to have been answered with appropriate attention. There was one recommendation made by 2 participants that resulted in a change in the survey. This change was to the second answer to question 1, Section C – International Training Programs. The original answer read “No (if “No”, go to question 2)” and it was recommended that this be changed to read “No (if “No”, go to question 3)”. After a review of questions 1, 2 and 3, the author agreed with the recommendations and changed answer 2 in question 1. This action was taken to reduce confusion.

To establish reliability (Crocker & Algina, 1986), next the author solicited a convenience sample of six businessmen to take the survey and then take the survey a second time 7 to 10 days later in a test-retest format. This convenience sample was gathered from the Tampa Bay Economic Zone and consisted of a cross section of business executive from various fields, business types and sales.

The participants were each given the duplicate surveys in two separate addressed envelopes and asked to complete survey one and seal it immediately. The participants were asked to complete survey two 7 to 10 days later and return the completed surveys to the researcher immediately. None of the 6 participants completed the surveys within the time allotted, so a second convenience set of 6 participants was solicited and all surveys were completed within the 7 to 10 day time frame (Appendix 16).

A review of their response data shows that there was a 98% overall agreement between the answers given by the respondents in the two administrations of the instrument (Appendix 17). Of the 1422 pairs of answers given by the six participants, only 29 answers in the retest did not match the original test. In addition, all four of the study's questions had agreement rates of at least 95% while survey answers had agreements from 100% to 66.6%. Only five survey questions had agreement percentages of less than 95%. They were questions A3, A6, D4, A9 and C6 (Appendix 18).

Question A3 had one person change one answer in a fill-in-the-blank question about employees. The answer was changed from 15% to 20 %.

Question A6 had two respondents change a total of five answers regarding the importance of various world regions now and ten years from now. Respondent 2 changed four answers moving all four answers one level closer to center on the Likert-like scale. Respondent 5 changed one answer moving one number one level away from center on the Likert-like scale.

Question D4 asked about respondents perceived career path and whether it was domestic, international or mixed. This trifurcated answer was changed by one respondent from mixed to domestic.

Question A9 had five respondents change a total of nine answers pertaining to the importance of international skills to staff and line personnel. Respondent 1 changed one answer, moving it two levels through the center to more importance. Respondent 2 changes four answers. Three of the four answers were changed one level closer to center and one answer was changed one level farther away from center on the Likert-like scale. Respondent 3 changed one answer and moved it one level farther away from center on the Likert-like scale. Respondent 5 changed two answers, moving one a single level closer to center and moving one a single level farther from center on the Likert-like scales. Respondent 6 changed one response and moved it one level farther from center on the Likert-like scale.

Question C6 has two respondents that changed their answer about the value of a certificate in international skills. Respondent 4 moved the answer one level away from the center and Respondent 5 moved the answer one level closer to the center on the Likert-like scales.

Change rates differed by respondent and ranged from 11 changes for Respondent 2 down to three changes for Respondents 1 and 6. A total of 18 responses on Likert-like scales were changed with 11 moving toward the center, 7 moving away from the center and one answer moving through the center. Of the five dichotomous answers that changes, five moved from negative to positive and four moved from

positive to negative. The one trifurcated answer that changed moved from a mixed response to a singular response.

After review, there were no patterns in the changed responses that indicated a problem with the survey. Changes in responses appeared to be marginal reevaluations of the questions and the responses did not focus on any particular issues. Changes on Likert-like scales tended to move toward the center with the repeated measurement.

The pilot instrument named *U.S. Business Needs for Technical/Occupational Employees with International Expertise* was renamed *The Olney Survey of U.S. Business Needs for Technical/Occupational Employees with International Expertise* and was used in this study (Appendix 4).

Focus Group Discussion Outline

A focus group of business executives and a focus group of community college employees with interest in technical and occupational program curriculum was convened to consider study findings and to provide a richer context to action recommendations (Kitzinger, 1995). After the presentation of the instrument results, identical open ended questions (Krueger, 1994) were asked of the two groups (Appendix 9). The intent of the questions was to discover what meaning members of these two different user groups would find in the reported results of questionnaire data.

Procedures

Following approval of the IRB by the University of South Florida, a new population database of businesses with five or more employees from the 8 county Tampa Bay Economic Zone was downloaded from Reference USA (2007) during the second week of February 2008. A random sample of 1,920 businesses was selected

using the Excel random number generator. Next a post card (Appendix 19) was sent to the 1,920 randomly sampled businesses on March 10, 2008 asking them to expect the survey within the week and to complete it. On March 12, 2008 the survey with cover letter (Appendix 20) and return envelope was mailed to the same business addresses. On March 19, 2008, a follow-up postcard (Appendix 19) was sent to each recipient to improve the response rate. Data analysis began on April 15, 2008.

Descriptive and comparative data were organized to support the study questions and were graphed for Power Point presentation to the two focus groups. The business leader focus group was convened first, followed three weeks later by the community college focus group. All attendees were briefed on informed consent and an Informed Consent Form was signed by each participant (Appendix 8).

The business leader focus group plan called for five to ten business leaders from the greater Tampa Bay area. Their participation was solicited through the Greater Tampa Bay Chamber of Commerce using material prepared by the researcher (Appendix 21 and Appendix 22). Twelve focus group members convened in a conference room in the Greater Tampa Bay Chamber of Commerce offices and the researcher briefed on, and received Informed Consents from all participants. The researcher then conducted the introduction of findings and the ensuing discussion. The researcher scribed for the discussion and the discussion audio was recorded. The qualitatively descriptive analysis of the discussion was limited to a review of focus group recording and summary notes to add context and depth to the findings.

The community college focus group plan called for five to ten community college personnel with interest in technical and occupational program curricula from

the greater Tampa Bay area. Their participation was to be solicited directly from community college administrative offices (Appendix 23), and agreement to participate verified electronically (Appendix 24). Four focus group members convened in a classroom at the Hillsborough Community College Ybor City Campus and the researcher briefed on, and received signed Informed Consents from all participants. The researcher then conducted the introduction of findings and the ensuing discussion. The researcher scribed for the discussion and the discussion audio was recorded. The qualitatively descriptive analysis of the discussion was limited to a review of focus group recording and summary notes to add context and depth to the findings.

Data Management

Security

All data were gathered on paper and are kept in a locked cabinet when not being analyzed. Data from the instrument were loaded on an Excel file by the researcher. Identifiable individual and business information was not requested and was not loaded in the Excel files. All electronic files were placed under password protection and backed up on external drive which has been locked up with the paper copies of data.

The electronic audio recording was digitally stored on an Olympus VN2100 Digital Voice Recorder that is kept in a locked cabinet when not being analyzed. All audio analysis took place in a single occupancy room.

Analysis Plan

Random sample and respondent data were analyzed using goodness-of-fit chi-square (Glass & Hopkins, 1996) to determine if the random sample and respondents were a fair representation of the population. Questionnaire data were tabulated and

analyzed. Results of the study analysis were discussed with a focus group of area businessmen and a focus group of area community college personnel with an interest in technical and occupational programs. Results of these discussions have been reported in this study.

Demographic data provided by the respondents using questions from questions A1 through A8, B1 and section D were compared to the population data to determine if there was a difference between the population and respondents as they related to business types, employee numbers or domestic sales.

Study question 1 was: What international skills do surveyed U.S. business and industry executives believe are important for the sub-baccalaureate technical and occupational employees that they hire and promote? This question was evaluated using answers provided to questions A9, A12, B2, B3 and B4. Descriptive data and repeated measure ANOVA to test for differences in the means ratings for the two different employee skill levels was conducted to determine the level at which international skills become important considerations for hiring and promotion. This repeated measure analysis is a one between (business leaders) and two within (employee skill level and international skills). This design allows for the subdividing of the business leaders' perceptions into two grouping variables (Stevens, 2002). In addition, career fields were correlated with international skills needed. The results of this question were then discussed with the two focus groups and the discussion highlights reported.

Study question 2 was: How do surveyed U.S. business and industry executives engage their companies' sub-baccalaureate technical and occupational employees in training programs to develop international skills? To answer this question, the

researcher analyzed the respondent answers to question C1 to determine proportions and confidence intervals and then utilized business demographic information to relate the results back to the population. The results of this question were then discussed with the two focus groups and the discussion highlights reported.

Study question 3 asked: In what ways do surveyed business and industry executives think U.S. community college technical and occupational degree programs should change with respect to their international skills objectives? To answer this question, descriptive analysis and ANOVA were performed on the responses to survey questions C4 and C5 and the results ranked by mean score. In addition, career fields from question A12 were correlated with suggested improvements in programs. The results of this question were then discussed with the two focus groups and the discussion highlights reported.

Chapter Summary

Chapter three outlined the methods used in conducting this research. The study design, setting, sampling methods, instrumentation, procedures and data management were presented. Emphasis was placed on the validation of *The Olney Survey of U.S. Business Needs for Technical/Occupational Employees with International Expertise* and the protection of human subjects.

Chapter Four

Overview of the Findings

The primary purpose of this study was to conduct a needs assessment to determine whether international skills were considered important for employment entry or movement for sub-baccalaureate technical/occupational employees, and to determine where businesses have been obtaining training in international skills. In addition, this study garnered business recommendations for the improvement of international skills education in community college occupational and technical programs. This chapter presents the respondent and business demographics, and responses from the survey respondents and the two focus groups for each of the three research questions.

Analytical Strategy

Unlike studies that measure international skills by focusing on business majors or discussions with academics, this study was designed to gather the opinions of technical/occupational employers about international skills needed by their sub-baccalaureate employees. Using the data provided by responses to a random sampling, this study used demographics, chi squared, proportions, and analysis of variance (ANOVA) to determine the current status of international skill needs, the usage of various international skill training providers, the recommendations for changes in technical/occupational programs to improve international skills and to capture desired support from businesses. The assumptions of ANOVA and chi-squared were assessed for violations. If violations were found, the necessary adjustments were made.

Survey Respondent and Business Demographics

Survey Respondents

From a population of 64,694 businesses, 1,920 businesses were randomly selected and had questionnaires (Appendix 4) mailed to them. A total of 145 responses were completed and returned. This represented a 7% return and provided a confidence level of only 76% with a margin of error of +/- 5%.

Questions pertaining to respondent information, company profiles and international activities consisted of fill in the blank, dichotomous, continuous, discrete and Likert-like scales. Fill in the blank questions focused on the respondent's title and level of education. Dichotomous answers, by far the most numerous, looked at job responsibilities, overseas experience, language skills, barriers to international business endeavors, career fields and employee education levels. Continuous scales were used to capture respondent service overseas, company sizes and sales, growth in international activity, and the impacts of shortages in employees with international skills. Discrete answers were used to identify firm types, and Likert-like scales were utilized to capture the importance of respondent duties, the current and future importance of international business and world regions to the firm, and the importance of various international skills to technical/occupational staff and line personnel.

The questionnaires were completed by 145 business leaders with 141 providing personal demographics. Respondents that defined themselves as owners constituted 25% of responses and managers 24% (Appendix 25). Of the respondent leaders, most (56%) had responsibility for international business decisions, had never been assigned outside of the United States (80%), consider their career paths to be domestic (81%),

spoke only English (66%), and had a bachelor's (32%) or master's degree (24%) as their highest academic attainment.

Business Demographics

Chi-Squared Goodness of Fit comparing the business types, business sizes and business sales of the population with the respondents reveals that the results for all three were significant with values of 20.89, 52.39 and 138.80 respectively (Appendix 26). The effect sizes for the Chi-Squared Goodness of Fit comparisons of the population and respondents were: business types ($\phi = .082$, small effect); business sizes ($\phi = .206$, medium effect) and; business sales ($\phi = .548$, large effect) (Cohen, 1988). When the respondent businesses' number of employees and total dollar sales were correlated with the international skills, about half of the correlations were positive and significant (Appendix 27). The respondents worked in businesses that spanned the types and sizes located in the Tampa Bay Economic Zone. Retail (19%), Health Care, Social Assistance Services (17%), Professional, Scientific, Technical Services (12%) and Accommodations/Food Services (10%) made up the largest of the business types. Businesses that employed 10 or less personnel (41%) and 11 to 20 personnel (27%) accounted for over 65% of businesses while only 9% of businesses employed more than 120 employees (Appendix 27). Measuring the respondent's businesses by total U.S. dollar sales showed that over 44% of the businesses reported one million dollars or less in annual sales and over 90% had less than 20 million dollars in annual sales (Appendix 28). When it came to requiring employees to have international skills, 50% of the businesses responded that at least some of their employees needed the skills (Appendix 29).

This sample of businesses in the Tampa Bay Economic Zone believed the following current and future foreign regions are important to business (in order of importance): Latin America ($M = 1.98$, $SD = 1.22$), Europe ($M = 1.65$, $SD = 1.03$), Asia ($M = 1.41$, $SD = 0.94$), Middle East ($M = 1.22$, $SD = 0.62$), and Africa ($M = 1.20$, $SD = 0.64$) (Appendix 30). Regarding current growth of international activities compared to domestic activities in this sample, 44% ($n = 61$) believed the international activities were growing at the same rate or more rapidly than the domestic activities. Further, 15% of the businesses believed that international sales would be a significant or critical component of their income in the next 10 years (Appendix 31). Some of the businesses (15%, $n = 21$) stated that employees lacking in international skill competencies impacted their income. A larger percentage (45%, $n = 64$) believed that with more international expertise their overall business would increase.

Eighty-eight percent of the respondents indicated that they employed high school graduates that had completed sub-baccalaureate coursework as their highest level of education. The businesses reported that they had these employees working in various career fields to include: business management (51%), business support (49%), trade/industry (26%), marketing (24%), health sciences (21%), computer/information sciences (19%) and education (15%) (Appendix 32). Fifty-six percent of the companies reported employing workers with an associate's degree as their highest education, 46% with community college coursework without attaining a certificate or degree, 45% with a community college program certificate and 22% with another sub-baccalaureate degree.

The sample companies reported that over 77% had no international business operations and that 18% conducted all international business operations from the U.S. Only 2% of the sampled companies reported having offices outside of the United States (Appendix 33).

When asked if they had difficulty finding U.S. nationals with desired international skills, over 21% (n = 30) indicated that they did have difficulty. The respondents went on to highlight a need for language skills, comfort working in international/multicultural groups, knowledge of non-English technical terms, and knowledge of business culture and practices in other countries as their most pressing needs (Appendix 34). Thirty two percent (n = 46) of the respondents indicated that over the next 10 years their companies would be placing greater emphasis on international skills for technical/occupational managers and employees.

The data provided by the respondents looking at international training programs consisted of a mixture of dichotomous and Likert-like scales. The dichotomous scales identified engagement in training programs, provider types, program types, training obstacles, recommended changes in community college technical/occupational programs and the willingness by the respondent to partner with community colleges to create a Certificate in International Skills. The Likert-like scales focused on the importance of various suggested improvements in community college technical/occupational programs and the value of a Certificate in International Skills.

Seventeen percent of businesses (n = 24) reported that they present international training programs to their employees. Respondent companies stated that they provided multicultural staff management training most often (17%, n = 24). This was followed

by foreign language training (7%), international technical standards (6%), business or global business practices (6%), regional or global updates (4%), international cross-cultural seminars (5%), pre-departure training before foreign assignment (2%) and cross-national functional team training (2%). Over 18% of businesses reported that they used in-house providers to conduct international skills training. They also reported the use of consulting firms (6%), non-profit/government providers (3.5%), community college providers (3%) and university providers (2%) (Appendix 35).

When asked if training needs were being met, 34% of reporting businesses (n = 20) stated that their international training needs were not being met. Of the unsatisfied businesses, they reported that the training was not focused on their training needs (n = 7), was too expensive (n = 4), was too difficult to coordinate (n = 4), and was not kept current with the international business environment (n=2) (Appendix 36).

Next, the respondents who did not utilize community college resources for international training were asked to explain why they were not using the community colleges. In order, they responded that: their needs were being met or exceeded elsewhere (n = 85), they were not aware of what the community college could offer (n = 56), the community college has not met with them about their needs (n = 10), the community college won't/doesn't offer what their firm needs (n = 5), the class schedules were not flexible enough to meet their needs (n = 2) and the community college programs were too difficult to set up (n = 2) (Appendix 37).

The final dataset provided by the respondents looked at whether businesses would value a Certificate in International Skills and if businesses would be willing to partner with the local community college to create such a certificate. On average,

businesses only slightly valued the certificate ($M = 2.05$ of 5.0, $SD = 0.95$) (1 = not at all valued, 2 = only slightly valued, 3 = somewhat valued, 4 = valued, 5 = critically valued). Of the 141 responses, 35 (25%) businesses stated that they would value or critically value the certificate. With regard to partnering with the community college to create the Certificate in International Skills, 12 companies (8%) stated that they would be interested in partnering with the community college to create the certificate.

Focus Group Participants

The Business Focus Group consisted of twelve business members from the greater Tampa Bay economic zone. The group consisted of five managers, four vice presidents, one supervisor, one director and one staff development officer. They were employed by four financial institutions, one real estate company, one human resource company, and engineering/construction firm, a manufacturing company, a marketing company, a consulting firm and a hospitality firm (Appendix 5).

The Community College Focus Group had four education professionals from the greater Tampa Bay economic zone. The group consisted of one academic dean, one member who was both a professor and an academic program manager, a technical programs director and an international business instructor (Appendix 5). This group did not contain representation from each of the area community colleges, which may have biased the discussions.

Focus Group Initial Observations

The Business Focus Group first reviewed the study design, methods, sample and population demographics, and the list of international skills. When asked to comment, the discussion first focused upon the list of international skills. There was a consensus

that the list of international skills “provided a good foundation for reviewing business needs while staying vague enough to be poignant”. One of the members gave an anecdote about studying in Singapore and related that he had to be told by a local merchant that Singapore had been under British rule and that everyone there studied English. He expressed his disappointment in not knowing the history of Singapore and told the focus group that “the understanding of these [international] skills means showing common respect” for the cultures of our clients and partners. Another member related that his firm had international clients and partners that worked in their Tampa office and that his firm’s employees had to learn about the cultural needs of these residents. These needs have included accommodations for prayer rooms, work schedules, foods, social expectations, office etiquette, and global perspectives. Within the focus group there was also a consensus that the researcher should review whether there may be a need to “flesh out” religion as an important subset of the international skill pertaining to having knowledge of a country’s socio-economic and political structures. The group then discussed whether the need for foreign language skills was decreasing with the increased use of English around the world. This discussion concluded that with existing markets there may be a decreasing need for foreign language skills, but that to develop international markets in new areas, foreign language was imperative.

The Community College Focus Group first reviewed the study design, methods, sample and population demographics, and the list of international skills. There was an opening statement by a member of the group that “it is extremely imperative that we teach the culture, economics and politics of other nations if we want to compete in the

international market”. This statement was followed by a lengthy discussion about the list of international skills. This lively discussion questioned the logic behind the order of the listed skills, questioned whether the listed skills overlapped and questioned whether the purpose of the list was to provide an accounting for résumé purposes or to provide a list of what needed to be taught and trained. The discussion questioned whether there was a need to add “education system” as an important subset of the international skill pertaining to having knowledge of a country’s socio-economic and political structures. The group also discussed whether the need for foreign language skills was decreasing with the increased use of English around the world. After a discussion, it was concluded with a statement that it was a moot point because foreign language “must politically stay on the list”.

Study Questions

Question One

The first study question was: What international skills do surveyed U.S. businesses and industry executives believe are important for the sub-baccalaureate technical and occupational employees that they hire and promote?

Survey Respondents.

This question was answered using descriptive data from four questionnaire responses, analysis of variance to test the difference in the mean ratings for entry level and management level technical/occupational staff and line positions and by correlating career fields with international skills needed. The results of this question were then discussed by the two focus groups and the discussion highlights reported.

The majority of responses (56%, $n = 78$) indicated that at least one international skill was an important factor in the staffing decision process in terms of hiring, reassignment, and/or promotion decisions for at least some technical/occupational positions. Of those that chose only one skill (8 of 11) as important, they overwhelmingly (73%) chose foreign language skills, although having an appreciation for cross-cultural differences was chosen most often among all respondents, including those that chose more than one skill as important. In response to whether international skills were important to staffing decisions about entry or management level technical/occupational staff or line positions, the respondents rated the appreciation of cross-cultural differences and foreign language skills the highest of the international skills for all technical/occupational level and position staffing decisions. International work experience was rated lowest on the not important – critically important scale for all levels and positions (Table 1).

Overall, when evaluating the importance of international skills on a 5 point Likert-like scale, the mean respondent rating for each of the seven skills was between 1.27 and 2.23. (1 = not at all important; 2 = only slightly important; 3 = somewhat important) with standard deviations between 0.61 and 1.25. Foreign Language skills for technical/occupational staff ($M = 2.15$, $SD = 1.16$) and line personnel ($M = 2.19$, $SD = 1.18$) as well as Appreciation of cross-cultural differences for staff ($M = 2.23$, $SD = 1.25$) and line personnel ($M = 2.17$, $SD = 1.25$) receiving the highest mean scores. The business leaders' mean scores for appreciation of cross-cultural differences ($M = 2.20$, $SD = 1.25$) and foreign language skills ($M = 2.17$, $SD = 1.17$) were higher than the other five international skills on the no importance/importance scale for both

Table 1

International Skills and Staffing Decisions

Occupational levels at which various international skills become important factors in hiring, reassignment, or promotion decisions?

| <u>International Skills</u> | Technical/Occupational Positions (n = 142) | | | | | | | | |
|---|--|--|---------------------------------------|---|--|--------------------------------------|--|---|------------------------------|
| | Raw scores | | | | | | | | |
| | ENTRY Level Tech/Occ STAFF Positions | MGMT Level Tech/ Occ STAFF Positions | ALL Tech/Occ STAFF Positions | ENTRY Level Tech/Occ LINE Positions | MGMT Level Tech/Occ LINE Positions | ALL Tech/Occ LINE Positions | ALL Tech/Occ ENTRY Level Positions | ALL Tech/Occ MGMT Level Positions | ALL Tech/Occ Positions |
| Country socio-economic/ Political Knowledge | 8 | 15 | 23 | 4 | 14 | 18 | 12 | 29 | 41 |
| Appreciation of cross-cultural differences | 30 | 51 | 81 | 31 | 45 | 76 | 61 | 96 | 157 |
| A global perspective | 11 | 21 | 32 | 8 | 24 | 36 | 19 | 45 | 64 |
| Understanding of local market/ business practices | 9 | 21 | 30 | 8 | 23 | 31 | 17 | 44 | 61 |
| International work experience | 2 | 7 | 9 | 1 | 10 | 11 | 3 | 17 | 20 |
| Foreign language | 35 | 37 | 72 | 31 | 36 | 69 | 66 | 73 | 139 |
| TOTAL | 95 | 152 | 247 | 83 | 152 | 235 | 178 | 304 | 482 |

NOTE: Total raw scores on a dichotomous (0= not important and 1 = important) scale.

technical/occupational staff and line personnel. In order, these were followed by understanding of local market/business practices ($M = 1.69$, $SD = 1.17$), a global perspective ($M = 1.60$, $SD = 0.96$), understanding of international technical/occupational standards ($M = 1.49$, $SD = 0.98$) and country socio-economic/political knowledge ($M = 1.45$, $SD = 0.85$). The lowest mean score was for possessing international work experience ($M = 1.27$, $SD = 0.67$) (Table 2).

When utilizing these same data and looking at the percentage of respondents that consider the international skills to be somewhat important, important or critically important to possess, it became evident that international skills were desired by many businesses. Overall, between 5% and 38% of respondents rated each of the seven skills somewhat important, important or critically important and between 0.7% and 20% of the respondents rated each of the seven skills important or critically important.

Breaking out the individual skills by staff and line: Appreciation of cross cultural differences was considered somewhat important, important or critically important for staff personnel by 38% of respondents and by 38% of respondents for line personnel; Appreciation of cross cultural differences was considered important or critically important for staff personnel by 15.5% of respondents and for 16.2% of respondents for line personnel; Foreign language was considered somewhat important, important or critically important for staff personnel by 38% of respondents and by 34.5% of respondents for line personnel; Foreign language was considered important or critically important for staff personnel by 18.3% of respondents and for 20.4% of respondents for line personnel; Understanding of local market/business practices was considered somewhat important, important or critically important for staff personnel by 20.4% of

respondents and by 15.5% of respondents for line personnel; Understanding of local market/business practices was considered important or critically important for staff personnel by 8.5% of respondents and for 6.3% of respondents for line personnel; A global perspective was considered somewhat important, important or critically important for staff personnel by 19.0% of respondents and by 17.6% of respondents for line personnel; A global perspective was considered important or critically important for staff personnel by 12.7% of respondents and for 9.9% of respondents for line personnel; Country socio-economic/political knowledge was considered somewhat important, important or critically important for staff personnel by 13.4% of respondents and by 12.0% of respondents for line personnel; Country socio-economic/political knowledge was considered important or critically important for staff personnel by 7.7% of respondents and for 9.2% of respondents for line personnel; Understanding of international technical/occupational standards was considered somewhat important, important or critically important for staff personnel by 12.7% of respondents and by 9.9% of respondents for line personnel; Understanding of international technical/occupational standards was considered important or critically important for staff personnel by 7.7% of respondents and for 3.5% of respondents for line personnel; International work experience was considered somewhat important, important or critically important for staff personnel by 7.0% of respondents and by 5.6% of respondents for line personnel; International work experience was considered important or critically important for staff personnel by 0.7% of respondents and for 1.4% of respondents for line personnel (Table 2). ;

Table 2

Importance of International Skills

| International Skills | Staff Personnel | | | | | | Line Personnel | | | | | |
|---|-----------------|------|------------|-------------------|-------|-------------------|----------------|------|------------|-------------------|-------|-------------------|
| | M | SD | SW + I + C | 95 CL Lower Upper | I + C | 95 CL Lower Upper | M | SD | SW + I + C | 95 CL Lower Upper | I + C | 95 CL Lower Upper |
| Appreciation of cross-cultural differences | 2.23 | 1.25 | .38 | .30 .46 | .16 | .10 .22 | 2.17 | 1.25 | .38 | .30 .46 | .16 | .11 .23 |
| Foreign language | 2.15 | 1.16 | .38 | .30 .46 | .18 | .13 .25 | 2.19 | 1.18 | .35 | .27 .43 | .20 | .14 .27 |
| Understanding of local market/ business practices | 1.73 | 1.22 | .20 | .14 .27 | .09 | .05 .14 | 1.65 | 1.11 | .16 | .10 .22 | .06 | .03 .11 |
| A global perspective | 1.64 | 1.01 | .19 | .13 .26 | .13 | .08 .19 | 1.55 | 0.90 | .18 | .13 .25 | .10 | .06 .16 |
| Country socio-economic/Political Knowledge | 1.51 | 0.93 | .13 | .08 .19 | .08 | .05 .14 | 1.39 | 0.76 | .12 | .08 .18 | .09 | .05 .15 |
| Understanding of International technical/occupational standards | 1.47 | 0.96 | .13 | .08 .19 | .08 | .05 .14 | 1.51 | 0.99 | .10 | .06 .16 | .04 | .02 .08 |
| International work experience | 1.27 | 0.61 | .07 | .04 .12 | .01 | .00 .04 | 1.27 | 0.61 | .06 | .03 .11 | .01 | .00 .05 |

Note 1: Responses provided on 5-point response scale (1 = Not at all important, 2 = only slightly important, 3 = somewhat important, 4 = important, 5 = Critically important).

Note 2: SW = Somewhat Important, I = Important, C = Critically Important

Note 3: 95 CL = 95% Confidence Limit

The mean ratings between entry level and management level scores for the importance of international skills were significantly different ($F = 233.75, p < .0001$) (Table 3). This repeated measure analysis is a one between (business leaders) and two within (employee skill level and international skills). This design allows for the subdividing of the business leaders' perceptions into two grouping variables (Stevens, 2002). Comparing aggregate scores for technical/occupational entry level positions to management level positions, respondents reported that they consider international skills more often when making staffing decisions for management positions (63%, $n = 304$), except when considering foreign language skills (47%, $n = 139$). Foreign language skills were equally important for staffing decisions for both entry level and management level positions ($F = .061, p = .6068$). Appreciation of cross-cultural differences (33%, $n = 159$) and Foreign language skills (29%, $n = 140$) were the most frequently considered international skills for entry level staff and line positions (Table 3), as well as for management level staff and line positions (Table 1).

Correlating individual career fields with the importance of individual international skills revealed 11 weak to medium strength correlations ($p < .05$). Agricultural and Natural Resource careers correlated with Understanding of local market/business practices ($r = .26$). Business management correlated with Foreign Language ($r = .25$). Business support correlated with Country socio-economic/political knowledge ($r = -.16$), with Appreciation of cross-cultural differences ($r = .23$) and with Foreign language ($r = .19$). Three career fields: Computer and information science careers; Engineering, architectural, and science technologies and Trade and industry careers correlated with International work experience ($r = .21, .29, .29$ respectively). Finally,

Table 3

Repeated Measures ANOVA testing for means differences of International Skills by Technical/Occupational Positions

| Repeated Measures ANOVA testing for means differences of International Skills by Technical/Occupational Positions | | | | |
|---|---------------------------|----------------|---------|--------|
| Tested Means | df | MS | F | P |
| All International Skills by All positions | Between 23 Within 3197 | 1.438 0.084 | 17.06* | <.0001 |
| Country socio-economic/political knowledge by All positions | Between 3 Within 417 | 0.192 .039 | 4.96* | .0022 |
| Appreciation of cross-cultural differences by All positions | Between 3 Within 417 | 0.773 0.075 | 10.26* | <.0001 |
| A global perspective by All positions | Between 3 Within 417 | 0.424 0.049 | 8.74* | <.0001 |
| Understanding of local markets/business practices by All positions | Between 3 Within 417 | 0.440 0.050 | 8.76* | <.0001 |
| International work experience by All positions | Between 3 Within 417 | 0.129 0.028 | 4.62* | .0034 |
| Foreign language by All positions | Between 3 Within 417 | 0.049 0.081 | 0.061 | .6068 |
| Entry Level Staff by All International Skills | Between 5 Within 695 | 1.27 0.067 | 18.9* | <.0001 |
| Management Level Staff by All International Skills | Between 5 Within 695 | 1.82 0.088 | 20.8* | <.0001 |
| Entry Level Line by All International Skills | Between 5 Within 695 | 1.31 0.066 | 19.86* | <.0001 |
| Management Level Line by All International Skills | Between 5 Within 695 | 1.24 0.084 | 14.80* | <.0001 |
| All Management Level by All Entry Level | Between 2 Within 142 | 97427 416.8 | 233.75* | <.0001 |

the field of Public, legal, and social services correlated with three international skills: Country socio-economic/political knowledge ($r = .42$); Appreciation of cross-cultural differences ($r = .18$); and A global perspective ($r = .26$) (Table 4).

Focus Group Participants.

The Business Focus Group participants expressed surprise that the ratings for the international skills were not higher overall, but rationalized the relatively low scores by noting that the large number of small businesses within the greater Tampa Bay community may sense that they have very little international exposure. The group universally agreed that sub-baccalaureate degree employees are having more contact with other cultures than they used to and that the need for international skills was extremely important in the Tampa market as it grows into a more diverse community and business hub. The discussion moved to a discussion on the importance of cultural sensitivity and the need for Americans to temper their arrogance and stretch out to other cultures and countries by understanding their governments, social systems and histories. One of the members told the story of an Orlando hospitality businessman that organized a drive to purchase water purifiers for Haiti after a recent hurricane. His expressed empathy so endeared him to his large Haitian employee population that his customer satisfaction has markedly improved. Another member bluntly stated that if he had more Spanish speaking employees, he could sell more products locally and abroad. As a group there was a belief that cultural competence was more important than language acquisition, although language was still instrumental in developing untapped international business areas. When the group looked at the significant correlations between career fields and international skills, there was a belief that this section was

Table 4

Correlations of Career Fields with International Skills

| Career Fields | International Skills | | | | | | | |
|---|----------------------|-----------|-------|-------|-------|-------|-------|-------|
| | <u>M</u> | <u>SD</u> | ISCO | ISAP | ISAG | ISUN | ISIW | ISFL |
| Agriculture and Natural Resources | 0.08 | 0.27 | .03 | -.02 | -.05 | .26** | .09 | .06 |
| Business Management | 0.52 | 0.50 | -.11 | .08 | -.03 | .11 | .11 | .25** |
| Business Support | 0.49 | 0.50 | -.16* | .23** | .07 | .12 | .07 | .19* |
| Communications and Design | 0.08 | 0.28 | -.01 | -.02 | -.06 | .16 | .07 | .02 |
| Computer and Information Sciences | 0.19 | 0.39 | .01 | .07 | .05 | .23** | .21* | .10 |
| Education | 0.15 | 0.36 | .07 | .10 | .06 | .05 | -.00 | -.09 |
| Engineering, Architectural and Science Technologies | 0.13 | 0.34 | .12 | .10 | .16 | .08 | .29** | -.05 |
| Health Sciences | 0.21 | 0.41 | .08 | .02 | -.01 | -.01 | -.05 | .05 |
| Marketing | 0.24 | 0.43 | .02 | .08 | .01 | .12 | .18* | .14 |
| Personal Services | 0.11 | 0.31 | -.05 | .02 | -.03 | .12 | .04 | -.02 |
| Protective Services | 0.08 | 0.27 | -.01 | -.06 | -.05 | .06 | .08 | -.05 |
| Public, Legal, and Social Services | 0.13 | 0.34 | .42** | .18 | .26** | .11 | .11 | .12 |
| Trade and Industry | 0.24 | 0.43 | -.06 | .06 | .04 | .04 | .30** | .15 |
| <u>International Skills</u> | | | | | | | | |
| Country socio-economic/political knowledge | 0.29 | 0.77 | | | | | | |
| Appreciation of cross-cultural Differences | 1.10 | 1.50 | | | | | | |
| A global perspective | 0.45 | 1.00 | | | | | | |
| Understanding of local markets/business practices | 0.43 | 0.95 | | | | | | |
| International work experience | 0.14 | 0.45 | | | | | | |
| Foreign language | 0.97 | 1.42 | | | | | | |

NOTE. ISCO = Country socio-economic/political knowledge; ISAP = Appreciation of cross-cultural differences; ISAG = A global perspective; ISUN = Understanding of local markets/business practices; ISIW = International work experience; ISFL = Foreign language. n = 143. *p < .05. **p < .01

extremely important and demonstrated the diversity of international skills needed by different sub-baccalaureate career fields.

The Community College Focus Group participants expressed concern that the data was skewed because small businesses with no international expertise were given equal voice with large international corporations, but expressed that this equality may point toward the reason why it is so difficult to get public support and funding for international education programs. The group expressed no surprise that there would be a perceived need for international skills within sub-baccalaureate technical/occupational employees but questioned whether respondents had interpreted the questions within a personal, political or global context. One of the members equated the lack of expertise in the survey sample respondents to having chefs and policemen on an advisory committee to develop a welding program.

Question Two

The second question: How do surveyed U.S. business and industry executives engage their companies' sub-baccalaureate technical and occupational employees in training programs to develop international skills?, was addressed by analyzing the respondent answers to one question to determine proportions and confidence intervals and then utilized business demographic information to relate the results back to the population. The results of this question were then discussed with the two focus groups and the discussion highlights reported.

Survey Respondents.

In total, there was a higher percentage (33%, n = 47) of In-House training providers than any other international skills training provider. This was followed by

Consulting Firms (10%, n = 15) and by Non-Profit/Government (7%, n = 10), Community Colleges (4%, n = 6) and University providers (2%, n = 3) (Table 4). There was also a higher percentage (22%, n = 32) of Multicultural Staff Management training programs than any other international skills program type. This was followed by International Technical Standards (9%, n = 13), Foreign Language (7%, n = 10), Regional or Global Business Practices (6%, n = 9), International Cross-Cultural Seminars (5%, n = 6), Regional or Global Updates (3%, n = 5), Pre-Departure Training (2%, n = 3) and Cross-National Functional Team (2%, n = 3) training programs (Table 5).

Focus Group Participants.

The Business Focus Group participants agreed that a small proportion of businesses engage their companies' sub-baccalaureate technical and occupational employees in training programs to develop international skills. They agreed that the majority of training that is provided is in-house and by consultants. There was some surprise that so few businesses reported that they engaged community colleges for international skills training. The Business Focus Group surmised that there are so many barriers for small (10 person) firms feeling that they compete internationally, that they often fail to recognize the need to create opportunities through education and training. It was felt that many businesses “don't know what they don't know” about international business and clients.

The Community College Focus Group participants expressed no surprise in the data for study question 2. There was a discussion on why in-house training programs and consulting firms were listed separately that concluded with an understanding that

Table 5

Proportions and Confidence Intervals of International Skills Provider and Program Types

| Proportions and Confidence Intervals for International Skills Provider Types and International Skills Program Types | | | | |
|---|----|------------|----------------------------------|----------------------------------|
| PROVIDER TYPE | n | Proportion | Lower Limit (Confidence = 95) | Upper Limit (Confidence = 95) |
| In-House | 47 | .33 | .26 | .41 |
| Consultant Firm | 15 | .10 | .06 | .16 |
| Non-Profit/ Government | 10 | .07 | .04 | .12 |
| Community College | 6 | .04 | .02 | .09 |
| University | 3 | .02 | .01 | .06 |
| PROGRAM TYPE | N | Proportion | Lower Limit (Confidence = 95) | Upper Limit (Confidence = 95) |
| Multicultural Staff Management | 32 | .22 | .16 | .29 |
| International Technical Standards | 13 | .09 | .05 | .15 |
| Foreign Language Training | 10 | .07 | .04 | .12 |
| Regional or Global Business Practices | 9 | .06 | .03 | .11 |
| International Cross- Cultural Seminars | 6 | .05 | .02 | .10 |
| Regional or Global Updates | 5 | .03 | .01 | .08 |
| Pre-Departure Training Before Foreign Assignment | 3 | .02 | .01 | .06 |
| Cross-National Functional Teams | 3 | .02 | .01 | .06 |

these two providers filled unique taxing and control niches for businesses and represent unique competitive challenges for the community colleges. In addition, the group discussed the limited foreign language offerings of the local community colleges and

questioned whether there was a need to reconsider offering additional languages to meet growing and changing business and government needs.

Question Three

The third study question: In what ways do surveyed business and industry executives think U.S. community college technical and occupational degree programs should change with respect to their international skills objectives?, was answered using descriptive data and an analysis of variance on Likert-like and dichotomous responses to questions about recommended improvement. These results were then ranked in order of importance. In addition, career fields were correlated with suggested improvements in programs. The results of this question were then discussed with the two focus groups and the discussion highlights reported.

Survey Respondents.

Mandatory foreign language training ($M = 2.19$, $S = 1.25$) (Table 6) and requiring foreign language and more cultural education in the curriculum (28%, $n = 33$) (Table 7) were the highest scores on both the 5-point response scale and the dichotomous scale questions suggesting improvements in technical/occupational programs. The response scale question means continued in descending order with: Improved academic outreach in businesses seeking greater international competence ($M = 1.98$, $S = 1.21$); More emphasis on learning about other world areas/countries and cultures ($M = 1.96$, $S = 1.23$); Stronger international emphasis in technical/occupational program curricula ($M = 1.78$, $S = 1.16$); Creation of data banks/clearing houses on international resources ($M = 1.65$, $S = 1.04$); and More emphasis on exchange/overseas

Table 6

Suggested Improvements of International Skills Programs I

| Importance of suggestions for improving international skills content in technical and occupational programs (n = 143) | | | | | | | | |
|---|----------|-----------|------------|-------------------|-------------------|-------|-------------------|-------------------|
| International Skills | <i>M</i> | <i>SD</i> | SW + I + C | Lower Limit (95%) | Upper Limit (95%) | I + C | Lower Limit (95%) | Upper Limit (95%) |
| Mandatory foreign language training | 2.19 | 1.25 | .40 | .32 | .48 | 18% | .13 | .25 |
| Improved academic outreach to businesses seeking greater international competence | 1.98 | 1.21 | .35 | .28 | .43 | 15% | .10 | .22 |
| More emphasis on learning about other world areas/countries and cultures | 1.96 | 1.23 | .31 | .24% | .39 | 17% | .12 | .24 |
| Stronger international emphasis in technical/occupational program curricula | 1.78 | 1.16 | .25 | .19 | .33 | 12% | .08 | .18 |
| Creation of data banks/clearing houses on international resources | 1.65 | 1.04 | .24 | .18 | .32 | 7.0% | .04 | .12 |
| More emphasis on exchange/overseas internship programs | 1.56 | 1.05 | .17 | .12 | .24 | 9.0% | .05 | .15 |

Note 1: Responses provided on 5-point response scale (1 = Not at all important, 2 = only slightly important, 3 = somewhat important, 4 = important, 5 = critically important).

Note 2: SW = Somewhat Important, I = Important, C = Critically Important

Note 3: 95% CI = 95% Confidence Limit

internship programs ($M = 1.56$, $S = 1.05$) (Table 6). After the foreign language response, the 118 answers to the dichotomous change suggestions, in descending order were: Be flexible in providing classes and programs (21%); Teach international standards and technical terms (19%); Meet with my firm about my needs (11%); Incorporate international skills by using presentation methods that increase international expertise (11%); and Increase overseas experience in the program (8%) (Table 7).

Correlating career fields with suggestions for improvements revealed 19 significant correlations ($p < .05$, $n = 141$) (Table 8). The suggestion to Meet with my firm was significant for businesses employing career fields: Agriculture and natural resources ($r = .218$); Communications and design ($r = .166$); Protective services ($r = .373$) and Engineering, architects and science technologies ($r = .172$). Requiring more Foreign language and cultural education in the curriculum was significant for the career fields of: Agriculture and natural resources ($r = .198$); Education ($r = .170$); Personal services ($r = .172$); and Protective services ($r = .214$). The recommendation to place more emphasis on learning about other world areas/countries and cultures correlated with: Public, legal and social services ($r = .183$); and negatively with Trade and industry ($r = -.210$). A request for stronger international emphasis in technical/occupational program curricula correlated with Agriculture and natural resources ($r = .506$) and Health sciences ($r = .220$). Other correlations included: Increased overseas experience with Health sciences ($r = .172$); Teaching international standards and technical terms with Protective services ($r = .312$); Improve academic outreach to businesses seeking greater international competence with Business

Table 7

Suggested Improvements of International Skills Programs II

| Suggestions for changes to existing Community College Technical and Occupational programs to better support your global business endeavors? | | |
|---|-----|-----|
| Explanations | n | pct |
| Require more foreign language and cultural education in the curriculum | 33 | 28 |
| Be flexible in providing classes and programs | 25 | 21 |
| Teach international standards and technical terms | 23 | 19 |
| Meet with my firm about our needs | 13 | 11 |
| Incorporate international skills by using presentation methods that increase international expertise | 13 | 11 |
| Increase overseas experience in the programs | 10 | 8 |
| Other | 1 | 1 |
| TOTAL | 118 | 100 |

management ($r = .233$); and Creation of data banks/clearing houses on international resources with Health sciences ($r = .246$). There were nineteen correlations that were significant ($p < .05$). Of these, 16 effects were small, two were medium and one was large (Cohen, 1988).

Focus Group Participants.

The Business Focus Group participants felt that community college technical/occupational programs should include a course in cultural studies that spent about 2 weeks on the history, cultures and the social/business practices of each major world region. As a group they were willing to give up one technical course to

Table 8

Correlations of Suggestions for Improvements with Career Fields

| Correlation of Suggestions for Improvement with Career Fields (n = 138) | | | | | | | | | | | | | |
|---|--------|--------|-------|-------|-------|-------|-------|--------|-------|------|-------|-------|--------|
| | AG | BM | BS | CM | CP | ED | EN | HE | MA | PE | PR | PU | TR |
| IMP | .032 | .233** | -.042 | -.012 | -.045 | -.004 | -.024 | .147 | -.080 | .085 | .119 | .029 | -.093 |
| CRE | .063 | .117 | -.065 | .007 | -.059 | .029 | -.032 | .246** | -.046 | .037 | .127 | .057 | -.127 |
| MAN | .074 | .097 | -.044 | .116 | -.036 | -.020 | -.028 | .101 | -.052 | .086 | .080 | .086 | -.146 |
| MEX | .001 | .073 | -.088 | -.063 | -.119 | -.011 | .002 | .135 | -.043 | .068 | -.001 | .050 | -.107 |
| MLE | .080 | .153 | .034 | .011 | -.012 | .015 | .014 | .132 | -.021 | .067 | .096 | .183* | -.210* |
| STR | .506** | .101 | -.071 | -.029 | -.124 | .012 | -.018 | .220** | -.063 | .089 | .079 | .059 | -.163 |

NOTE 1. IMP = Improved academic outreach to businesses seeking greater international competence; CRE = Creation of data banks/clearing houses on international resources; MAN = Mandatory foreign language training; MEX = More emphasis on exchange/overseas internship programs; MLE = More emphasis on learning about other world areas/countries and cultures; STR = Stronger international emphasis in technical/occupational program curricula.

NOTE 2. AG = Agriculture and natural resources; BM = Business management; BS = Business support; CM = Communications and design; CP = Computer and information sciences; ED = Education; EN = Engineering, architectural, and science technologies; HE = Health sciences; MA = Marketing; PE = Personal Services; PR = Protective Services; PU = Public, legal, and social services; TR = Trade and industry.

*p < .05. **p < .01.

Table 8 (Continued)

Correlations of Suggestions for Improvements with Career Fields

| Correlation of Suggestions for Improvement with Career Fields (n = 141) | | | | | | | | | | | | | |
|---|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| | AG | BM | BS | CM | CP | ED | EN | HE | MA | PE | PR | PU | TR |
| MEE | .218** | .107 | .076 | .166* | .032 | .066 | .172* | .134 | .101 | .118 | .373** | .161 | .044 |
| BEF | -.041 | .053 | -.072 | -.070 | -.077 | .013 | -.060 | .087 | -.086 | .165 | .009 | -.068 | -.129 |
| INC | .117 | .107 | -.022 | -.009 | .032 | -.002 | -.048 | .134 | .044 | -.037 | .090 | -.054 | -.126 |
| REQ | .198* | .123 | -.013 | .071 | .029 | .178* | .090 | .040 | .031 | .172* | .214* | -.022 | -.046 |
| TEA | .127 | .135 | .042 | .009 | -.011 | .192* | .011 | .063 | .067 | .031 | .312** | .059 | -.111 |
| INC | .140 | -.041 | -.077 | .006 | -.074 | -.052 | .047 | .172* | .078 | .063 | .014 | .401 | .017 |
| IHA | -.185* | -.057 | .064 | .001 | .011 | -.146 | -.061 | -.049 | -.011 | -.058 | -.229** | .039 | .086 |
| OTH | -.022 | .080 | .085 | -.040 | -.041 | -.036 | -.032 | .085 | -.049 | .054 | -.025 | -.033 | -.049 |

NOTE 1. MEE = Meet with my firm about our needs; BEF = Be flexible in providing classes and programs; INC = Incorporate international skills by using presentation methods that increase international expertise; REQ = Require more foreign language and cultural education in the curriculum; TEA = Teach international standards and technical terms; INC = Increase overseas experience in the programs; IHA = I have no suggestions for change; OTH = Other .

NOTE 2. AG = Agriculture and natural resources; BM = Business management; BS = Business support; CM = Communications and design; CP = Computer and information sciences; ED = Education; EN = Engineering, architectural, and science technologies; HE = Health sciences; MA = Marketing; PE = Personal Services; PR = Protective Services; PU = Public, legal, and social services; TR = Trade and industry.

*p < .05. **p < .01.

accommodate this course of instruction. There was also a belief that community colleges have not effectively conducted outreach to the small businesses within the Tampa Bay area. There was a discussion about how the community colleges use the local Chambers of Commerce and Workforce Development Boards as intermediaries with small business and a consensus that this structure silenced input from many small business owners that may have training needs, but do not have an affiliation with the Chamber or a desire to be treated like a larger corporation. The conversation segued into a debate about the name of the HCC business training center. The center, named the Corporate Training Center was viewed to exclude small entrepreneurial or family owned businesses that shun corporate identity.

The Community College Focus Group participants expressed a belief that many businesses do not use their services and do not know that the community colleges can tailor programs to meet any business' needs. They acknowledged that they need to improve marketing and outreach to small businesses if they hope to increase market share or remain "vital to business". There was agreement that this study warrants follow-on studies to focus on industries and businesses that do or plan to do significant international business to determine whether they have specific international skills that they need for their employees. They acknowledged that they are unsure if existing community college advisory committees from business and industry have a pulse on the international community. The final discussion of the group bantered about whether there was room to add international skills into existing technical and occupational programs. There was agreement that it could be added through different methods and stated that the need to add it to programs was a "no brainer". The group concluded that

the international skills: Knowledge of a country's socio-economic and political structures; Appreciation of cross-cultural differences, A global perspective, and; Foreign language skills were generic topics and could be taught in all programs. The group also concluded that Understanding of local market/business practices and Understanding of International technical/occupational standards were international skills that were occupational/technical program specific, and that International work experience was beyond the scope of technical/occupational programs unless it was part of an apprenticeship program.

Chapter Summary

Chapter four contained the findings of the research. The chapter presented demographic response data about the respondents and their businesses. It also presented the responses from the survey respondents and the two focus groups for each of the three research questions.

Chapter Five

Discussion

Community colleges have a long history of providing technical/occupational programs to meet the needs of the local business community and career fields (Association of Career and Technical Education, 2006). Businesses also have a long history of establishing training programs in order to ensure that employees have the requisite skills for promoting business success (Shaw & Craig, 1994). There has also been growing evidence that employees of U.S. businesses need increased international skills in order for businesses and individuals to successfully compete in the growing globalized market (Bikson & Law, 1994; Kedia & Daniel, 2003). What has not been known was whether the need for international skills had disseminated past positions traditionally filled by post baccalaureate business majors and into the ranks of sub-baccalaureate technical/occupational employees. Therefore, with this question in mind, the current study proposed to determine what international skills are important for sub-baccalaureate technical and occupational employees, how companies engage their sub-baccalaureate technical and occupational employees in training programs to develop international skills, and what ways surveyed businesses believe U.S. community college technical and occupational degree programs should change with respect to their international skills objectives.

The discussion in Chapter Five is anchored in the literature and will present a comparison of this study's findings with the findings of the Kedia and Daniel (2003)

study. The Kedia and Daniel study was conducted using a survey instrument that focused on Fortune 500 companies and the international skill requirements and training shortcomings for post baccalaureate and post graduate level employees with degrees in business. The Kedia and Daniel study data was presented in percentiles with limited discussion. This chapter will then align the findings with the theoretical framework and provide recommendations for further study.

Demographics

The respondents to the current study typically reported that they had responsibility for international business decisions, had never been assigned outside of the United States, consider their career paths to be domestic, spoke only English, and had a bachelor's or master's degree as their highest academic attainment. Their businesses were predominately small and locally owned with little perceived exposure to the international market. Respondents to the Kedia and Daniel study represented influential corporations with national and international reputations (Appendix 38; Appendix 39; Appendix 40). These smaller and more diverse local businesses make up the vast majority of U.S businesses and provide an alternative representation of the cross-section of the U.S. business community (U. S. Census Bureau, 2007). These smaller companies also do not have dedicated training specialists like large corporations and may not have the expertise to recognize training needs (Kalantaridis, 2004; Kotey & Folker, 2007).

The larger corporations sampled in the Kedia and Daniel study are often surveyed to determine business needs in the U.S., even though they may not adequately

represent the vast majority of employees that work for small local firms (U.S. Census Bureau, 2007).

Surprisingly, over 40% of local businesses claimed international sales and 29% report having international business operations in the current study. While this is a large percentage, the Fortune 500 companies of the Kedia and Daniel (2003) study tended to have higher percentages of business sales from the international community and report that 100% of their businesses have international business operations (Appendix 41; Appendix 42).

It was also noteworthy that in the current study over 50% of local businesses claimed that they have employees working in positions requiring international knowledge or expertise. This is a large percentage of local employees though much less than the Fortune 500 companies of the Kedia and Daniel (2003) study, which tended to have higher percentages of employees working in positions requiring international knowledge an expertise (Appendix 43).

The current study focused on the greater Tampa Bay area of Florida and reported different world regions of importance than the national level Kedia and Daniel (2003) study. The current study placed the most importance on Latin America, followed by Europe, Asia, with the Middle East and Africa having very little importance. The Kedia and Daniel study respondents rated Asia as the most important region, followed by Europe, Latin America, the Middle East and Africa. Both studies believed that all international regions would be of more importance in the future (Appendix 44; Appendix 45). This regional difference may highlight Tampa's

proximity to Latin and South America and highlights the cautions that must be taken when using national studies to provide guidance for understanding local trends.

Comparing responses about current growth of international activities relative to domestic activities (Appendix 46), the current Tampa Bay study responses were skewed toward international activities growing less rapidly than domestic activities, with only nine percent of respondents believing that international activities were growing more rapidly than the domestic market. In contrast, the Kedia and Daniel study respondents were more evenly split between classifying relative growth of business activity as less rapidly (34%), about the same (27%), or more rapidly (39%).

Scales for comparison of the percent of total sales revenue from international business within the next 10 years were different for each study (Appendix 47). What was apparent was that there was a much lower percentage of Tampa Bay companies that believed international sales will be a core competency for future success with over 80% of businesses believing that no or a minimum percentage of business will be derived internationally compared to the Kedia and Daniel study which found that 63% of businesses believed international sales percentages will be higher in the next 10 years. While only 14% of the current study participants believed that international sales will comprise a significant or critical percentage of overall sales and 9% of respondents from the current study believe international sales are growing more rapidly than domestic activity, these percentages still speaks of the importance of the international market and the effects of globalization on the Tampa Bay economic zone. Earlier studies of the area also found that the future of the community will rely heavily upon its international gateways (USF Globalization Research Center, 2004).

Both studies had a significant percentage of responses indicating that the employment of insufficient numbers of internationally competent personnel had resulted in a failure to exploit international business opportunities (Appendix 48). An even larger and more substantial percentage of study participants from both studies believed that overall business would increase if they had more international business expertise (Appendix 49). Both studies had a noteworthy percentage of respondents state that it was difficult to find U.S. nationals with the international skills needed (Appendix 50). One third of current study respondents and 78% of Kedia and Daniel (2003) respondents reported that they will place greater emphasis on international skills in the next 10 years (Appendix 51). With the growing competition of the globalized market, market share for businesses is becoming increasingly important to maintain.

Study Questions

Question One

The first study question was: What international skills do surveyed U.S. businesses and industry executives believe are important for the sub-baccalaureate technical and occupational employees that they hire and promote? This study found that there appears to be evidence indicating that business and industry executives believe that international skills are needed by at least some sub-baccalaureate technical/occupational employees. This need appears to have some basis in career fields and that there are indications that the international skills of Appreciation of cross-cultural differences and Foreign language are significantly more important than the other skills. There is also an indication that all international skills except foreign language skills may be more important for managers than entry level

technical/occupational employees but that foreign language skills are of equally high importance to both levels. There is also evidence that there may be a tendency for businesses with larger number of employees and more sales revenues to consider more international skills in hiring and promotion decisions for sub-baccalaureate technical/occupational employees (Appendix 27).

Contrasting the two studies, the current study clearly highlighted foreign language skills and the appreciation of cross-cultural differences as the highest rated international skills (Appendix 52), whereas in the Kedia and Daniel study the appreciation of cross cultural differences and possession of a global perspective were rated only slightly more important than the other international skills (Appendix 53). The State of Florida and the Tampa Bay Region have a large Hispanic population and it might be speculated that this was a major influence on the differing results between the two studies on the issue of the importance of language skills.

Both studies found that international skills were more important for management level employees than entry level employees. This trend was true for all international skills, except foreign language skills for technical/occupational employees. The current study found that foreign language skills were equally and relatively highly important to entry level and management level employees alike (Appendix 54; Appendix 55; Appendix 56; Appendix 57; Appendix 58).

Question Two

The second question was: How do surveyed U.S. business and industry executives engage their companies' sub-baccalaureate technical and occupational employees in training programs to develop international skills? This study found

evidence that relatively few businesses conduct any international skills training. Training that is provided appears to be taught primarily by in-house resources. External training resources appeared to be used very infrequently, with community colleges used by less than 4% of companies.

Less than 20% of respondents in the current study and over 50% of Kedia and Daniel study respondents state that their firms engage in international skills training programs (Appendix 59). Of those that participate, the majority of training was conducted using in-house resources. Consultants were the next most frequently used international skills training resource for both study participants with other sources falling off by more than 50% (Appendix 60). About one third of respondents from both studies stated that their international training needs were not being met (Appendix 61). This is a tremendous shortfall for businesses to recognize, and an opportunity for training providers.

Question Three

The third study question was: In what ways do surveyed business and industry executives think U.S. community college technical and occupational degree programs should change with respect to their international skills objectives? This study found evidence that businesses believe that community colleges should change with respect to their international skills objectives. There appears to be some indication that businesses want community colleges to improve academic outreach to businesses, particularly small businesses, seeking greater international competence, mandate foreign language training in technical/occupational programs and place more emphasis on learning about other world areas/countries and cultures.

Both studies presented strong evidence that businesses would like to see changes in the international education and assistance provided by academic institutions. The majority of businesses in the Kedia and Daniel study wanted sweeping enhancements to the international aspects of graduate and undergraduate business programs. Within the curriculum, this sentiment strongly endorsed stronger international emphasis on learning about other world areas, a stronger international emphasis in the curriculum and mandatory foreign language training. Fifty percent or more of respondents to the current study echoed needs for improved academic outreach for businesses, stronger international emphasis in the curriculum and mandatory foreign language training within the community college technical/occupational programs (Appendix 62; Appendix 63). The Business Focus group within the current study endorsed these findings without reservation while the Community College focus group indicated that there was a strong belief that these findings were accurate, but there was need for further study.

Theoretical Context

Career Development

Students, employers and academic institutions are inherently involved in the work of career development. Influencing the new vocationalism and the growing awareness of the increased need for business soft skills, globalization has been recognized as a driving force that is influencing self-awareness, environmental awareness and career decision making (Super & Hall, 1978). Consisting of behavioral, attitudinal and knowledge factors associated with individual as well as institutional responsibilities (Tuckman, 1974), this study recognized that there is a symbiotic

relationship between these factors which works to change the nature of society, industry, individual jobs and individuals. Globalization affects these relationships and has been integral to the growing interdependence of cultures and the changing fabric of work skills (Friedman, 2005).

Needs Assessment

This study gathered data to demonstrate whether there was a need for sub-baccalaureate technical/occupational employees to possess international skills, to determine if there was a disconnect between the needed international skills and the possession of international skills, to determine where these skills were being taught, and to ascertain whether community colleges should change practices to better provide businesses with the resources desired to compete in the international market. Focusing on the societal needs assessment of this study, the institutional stake holders, in the form of business leaders, were asked if they believed this need for international skills had reached down into business organizations to the level of technical and occupational employees with sub-baccalaureate degrees. Their responses, gathered through survey and focus group designs, provided empirical and judgment assessments through observation, evaluation and discussion with stakeholders that possess expert knowledge (Cervano & Wilson, 2006; Grier, 2005). This study found indications of a need for international skills, shortcomings in the possession of international skills, discovered the providers of international skills instruction and determined that there is a difference between the international education services desired by businesses from community colleges and the international education services that businesses perceive that are offered by community colleges (Queeney, 1995).

Systems Theory

Systems theory provided the framework for this research project (Banathy, 1991). Focused on the dynamic interaction of parts within a larger system and recognizes that most social systems are inherently open to outside influences (Bailey, 1994), this study was conducted within the context of educating and training students for employment purposes within a globalized world (Appendix 1). In the micro context of the Greater Tampa Bay economic zone, this study discovered evidence that business and industry leaders do believe that globalization has influenced their business activities and has influenced the knowledge, skills and attributes that technical/occupational students need to acquire in order to better serve the needs of employers. The business and industry leaders further indicated that there appeared to be a difference between the acquired international skills and the desired international skills possessed by current sub-baccalaureate technical/occupational employees. As an open system, the model became more porous as students, businesses and industries enter and leave the geographic area for economic and educational opportunities. This permeability has resulted in a need to ensure that the limitations of this studies findings included a recognition there no data were collected to help determine if business leaders were reporting on their observations and employment of sub-baccalaureate technical/occupational employees that had received training and education from within the Greater Tampa Bay economic zone, or from outside of the area.

Study Limitations

This study is limited by a number of conditions. The entire study was conducted in the Tampa Bay Economic Zone with no attempt to determine if the

internationalization or composition of companies within the zone were comparable to other areas of the world. The data in the Reference USA database that were used in this study were not independently verified for accuracy by the author. The survey instrument provides only individual managers' perceptions of the demographics of the company and the international skills needed by technical/occupational employees, and cannot be construed as a complete gap assessment. The surveys that were received were a convenience sampling of the surveys mailed, and the resulting 145 respondents provided a confidence level of only 76% with a margin of error of +/- 5%. This non-response bias may have contributed to the respondent companies not statistically representing the population in sizes, types or sales totals, and because of the significant correlations between business sizes and dollar sales with the international skills, this can not be discounted as a bias within the results. There was no attempt by the author to provide surveys in languages other than English. The Focus Groups were convenience samples solicited by unblinded professionals who may have biased the groups' composition and resulting conclusions. The Community College Focus Group had only four members which did not provide representation from each of the area community colleges and the size of which may have stifled the free exchanges of a larger group (Kitzinger, 1995). The analysis of the focus group discussions were qualitative in nature, but did not meet the rigor of qualitative research.

Implications for Community Colleges

Community colleges play critical roles in our nation. Among the missions is a mandate to help provide business with a workforce that is trained and capable of keeping the U.S. economy productive in the new millennium (MacAllum, Yoder &

Poliakoff, 2004). This study has focused on whether the need for international skills had permeated business to the level that technical and occupational employees need to be trained in these international skills in order to allow Tampa Bay businesses to remain competitive in the world economy, whether and how businesses are providing international skills training, and whether and how businesses' believe community colleges should change in order to better support U.S. endeavors to expand international business practices.

This study has shown that the respondent business leaders in the Tampa Bay area appear to believe that community colleges should provide additional international skills training and education to sub-baccalaureate technical/occupational students. This belief was echoed by the Business Focus Group. The most pressing skills requested were for an appreciation of cross-cultural differences and foreign language skills. After years of decline in foreign language studies, there appears to be a resurgence of interest, sparked by international trade, a growing concern for our national competitiveness and the growing acceptance of cultural mixing. This request for different skill sets will need to be formally managed with a needs assessment by programs and/or industries and community colleges will need to determine the best ways to meet this emergent business need. There was an indication from the Business Focus Group that they were willing to eliminate some technical/occupational skills training in order to add the appreciation of cross-cultural differences and language skills into the curricula. In addition, there was a call from both the survey respondents and the Business Focus Group for community colleges to directly query small businesses in their academic catch basins to better understand their training and educational needs. In this vein, it

may be appropriate for community colleges to approach business Human Resource Departments (HRDs) to determine if partnerships would be appropriate to improve international skills training.

The Business Focus Group challenged whether the community colleges were expending the resources necessary to assess small business needs, or if they were primarily using the data gathered by third parties that had constituencies and agendas that may not have emphasized the needs of many small businesses.

Implications for Business

Business leaders need to recognize that their technical/occupational employees may be experiencing an increased requirement to possess international skills in order to fulfill their duties. Global trends have increased the quantity and rapidity of contacts between disparate business clients, partners, owners and employees. These trends, coupled with the flattening of organizations that have resulted in broader responsibilities and decision making requirements at lower levels in many organizations have created the need for new skill sets for many employees that have traditionally been isolated from interaction with cultural or international diversity. Businesses need to re-evaluate worker skill set requirements in light of the changing world economy and strive to ensure that they are providing the training and organizational structure to capitalize of the business environment of the 21st century. In addition, the business community needs to invest time, energy and resources to better partner with community colleges to shape and utilize the community college resources for business prosperity. It may be appropriate for business Human Resource

Departments (HRDs) to approach local community colleges to determine if partnerships would be appropriate to improve international skills training.

Future Research Recommendations

This study opens the door for a new line of inquiry on requirements for international skills for technical/occupational employees. Possible areas of future research include:

1. Refinement of the list of international skills.
2. Study replication using different geographic areas.
3. Study replication focusing on specific business types, business sizes or international business focus.
4. Study replication focusing on specific career fields or technical/occupational programs.
5. Methods replication but focusing on a single international skill.
6. Determine the effectiveness of various foreign exchange, study abroad and international apprenticeship programs are at instilling international skills in technical/occupational students.
7. Qualitative needs assessment of international skills requirements
8. Longitudinal study of the Tampa Bay area utilizing this study as the pre-assessment and conducting the post-assessment at some point in the future after a significant change in international trade (opening of the new Panama Canal), international agreements (new international trade agreements), business prosperity.
9. Survey businesses and rank order a combined listing of international skills and soft skills to broaden the understanding of the relative importance of these skills.

10. Determine whether there is there a need for international skills to be taught in the K-12 curriculum?

11. Determine the impact of the need for international skills training on Technical Colleges, Workforce Development Programs, Career Schools or Retraining Programs.

12. Survey Faculty of various academic institutions and determine of there is a recognized need for international skills to be taught in particular disciplines, regions, or institutional types or levels.

Chapter Summary

In this chapter the author discussed the implications of respondent and focus group demographics and study question responses, and compared the findings of this study to Kedia and Daniel (2003) study in order to ground the findings in the literature. In addition, this chapter placed the discussion within the study's theoretical context and provided discussions on the study limitations, implications for community colleges, implications for businesses and recommendations for future research.

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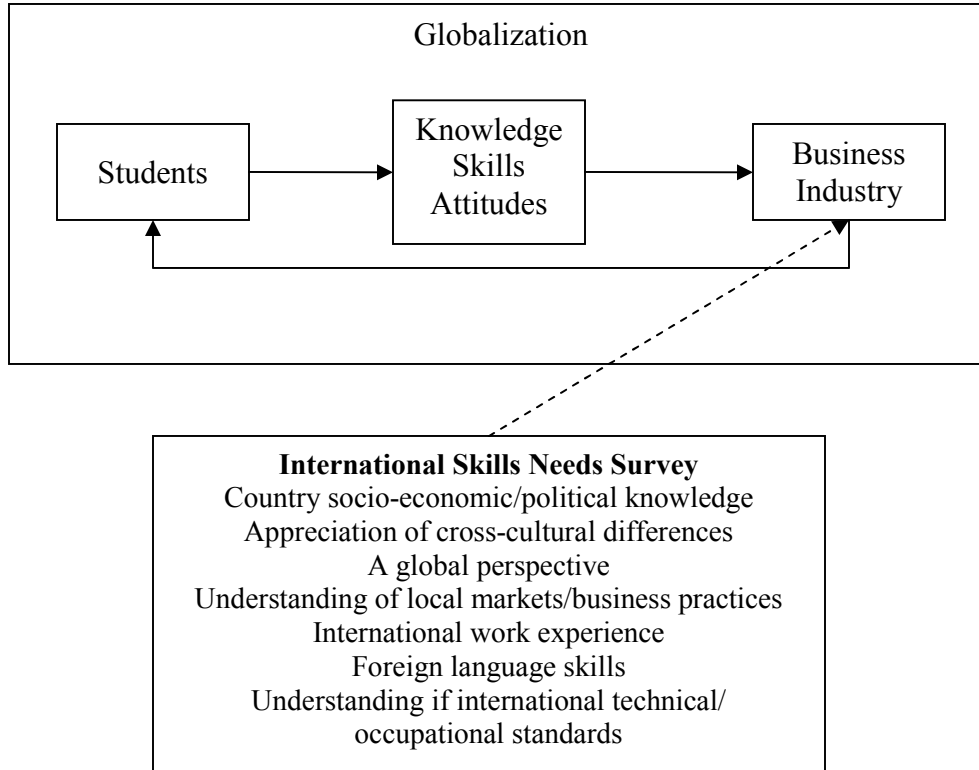
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Appendices

Appendix 1

Theoretical Framework – Systems Theory



Appendix 2

International Knowledge, Skills and Attitudinal Components

| | |
|--|--|
| <p>Country socio-economic/political knowledge Appreciation of cross-cultural differences A global perspective Understanding of local markets/business practices International work experience Foreign language skills - (Kedia & Daniel, 2003)</p> | <p>Intercultural competencies Understanding national and world issues Language skills Resiliency and coping skills: Individual-oriented Team work and leadership skills/traits: Group-orientation Understanding of organizational governance and strategies Understanding of computer technologies in society -(Reilly, 2004)</p> |
| <p>Aware of diversity, commonalities, and interdependence Recognizes the geopolitical and economic interdependence of the world Appreciates the impact of other cultures on American life Accepts the importance of all peoples Capable of working in diverse groups Understanding of the non-universality of culture, religion, and values Accepts responsibility for global citizenship - (Zeszotarski, 2001)</p> | <p>Self awareness of own culture Ability to compete across cultures successfully Broad cultural/social/linguistic/historic/current knowledge Foreign language skills Native experience in other cultures A global perspective and openness Awareness and respect cultural diversity and pluralism -(Hunter, 2004)</p> |
| <p>Knowledge of global current events Relate to people of other cultures Foreign language skills Ability to perform tasks in diverse cultural Appreciation of diversity -(Lambert, 1996)</p> | <p>Second language proficiency Comparative global knowledge Intercultural assimilation Disciplinary practice in a global context -(Rollins, H. A., 2005)</p> |
| <p>International perspective of business Appreciation of the differences between cultures Understanding of one's own culture Understanding of history, geography, and politics from different cultural contexts Understanding of local customs and language Ability to work within cross-cultural groups -(Bikson & Law, 1994)</p> | <p>Effective intercultural communication Able to shift cultural frame of reference Able to behave appropriately in a new culture Effective work practices in new culture Effective intercultural interpersonal skills A transforming global perspective -(Deardorff, 2006)</p> |
| <p>Appreciation of cross-cultural differences Capable of adapting to a different cultural environment Manage cross-cultural differences at the interpersonal level Country geo-socio-economic/political knowledge Understanding of local markets/business practices Ability to work within cross-cultural groups -(Sizoo & Serrie, 2004)</p> | <p>Cross-cultural skills Foreign language skills Country specific knowledge International business experience Interpersonal skills -(Moxon, O'Shea, Brown & Escher, 1998)</p> |
| <p>Flexibility Teamwork Comfort with diversity Creativity Drive/initiative Organizational skills Sensitivity and faculty with languages and cultures -(USF Globalization Research Center, 2004)</p> | |

Appendix 3
Kedia and Daniel Study Results

Importance of International Expertise for Professional Staff and Line Management

| International Knowledge and Skills | Importance for Professional Staff | | | Importance for Line Management | | |
|---|-----------------------------------|------|-------|--------------------------------|------|-------|
| | None | Some | Great | None | Some | Great |
| Country socio-economic/political knowledge | 13% | 52% | 36% | 22% | 50% | 28% |
| Appreciation of cross-cultural differences | 7% | 35% | 58% | 16% | 38% | 46% |
| A global perspective | 9% | 36% | 56% | 22% | 43% | 34% |
| Understanding of local markets/business practices | 9% | 42% | 49% | 21% | 42% | 37% |
| International work experience | 25% | 52% | 24% | 36% | 38% | 25% |
| Foreign language skills | 27% | 55% | 18% | 32% | 47% | 21% |

(Kedia & Daniel, 2003, p 19)

Appendix 4

The Olney Survey of U.S. Business Needs for Technical/Occupational Employees with International Expertise

A survey of business needs for technical/occupational employees with international business knowledge, skills, and experience

PURPOSE

This survey will be used to help educators know if business conditions have changed the training/educational needs of your employees and if the need for international skills has filtered down to employee positions that require occupational and technical expertise. International skills may be important soft skills for both international and domestic business endeavors.

INSTRUCTIONS

This survey will take approximately 20 minutes to complete. Please fill out the survey by answering each question accurately using a dark pencil or pen and return the completed survey in the enclosed envelope by April 15, 2008.

GLOSSARY OF TERMS

International Skills:

Knowledge of a country's socio-economic and political structures (Awareness of the social, economic and political structures and institutions within foreign countries that are or may be of business interest to your firm),

Appreciation of cross-cultural differences (An understanding that there are cultural differences throughout the U.S. and the world and that these differences are opportunities for business growth and enriched economic relationships through the leveraging of multiple perspectives and adaptability),

A global perspective (An ability to consider the interdependence of actions across the planet. This perspective allows individuals to consider and integrate the impacts of international actions on the local environment, as well as the impacts of local actions on the rest of the world),

Understanding of local market/business practices (An understanding of the actual way business is successfully conducted in country/cultural settings of interest),

International work experience (An individual's history of conducting business activities outside of the United States. This activity could be classified as being physically posted outside of the U.S. and living for a period of time on foreign soil, or as occupying a position in the U.S. that requires direct work in the international arena),

Foreign language skills (Degrees of understanding of a written or spoken language, not English, as well as the degrees of ability to concisely translate the intent and meaning of non-English languages between each other and with English) and,

Understanding of International technical/occupational standards (Knowledge and understanding of accepted international standards within one's technical/occupational field).

Line Personnel: Managers or employees working in primary revenue generating units in support of the organizational mission.

Staff Personnel: Managers or employees working in positions that are ancillary to the primary generating positions.

Thank you!

CONTINUE TO NEXT PAGE

Appendix 4 (Continued)

Section A - Company Profile and International Activities

1. Which one of the following U.S. Government categories best describes your firm? (Clearly mark one)

| | | |
|--|--|---|
| <input type="radio"/> Manufacturing Firm | <input type="radio"/> Accommodations/Food Services | <input type="radio"/> Health Care, Social Assistance Services |
| <input type="radio"/> Financial/ Insurance Services | <input type="radio"/> Retail Firm | <input type="radio"/> Construction |
| <input type="radio"/> Professional, Scientific, Technical services | <input type="radio"/> Wholesale Trade | <input type="radio"/> Other (specify) _____ |

2. Approximately how many employees does your company currently employ?

10 or less
 11 - 20
 21 - 39
 40 - 80
 81 - 120
 121 - 215
 216 - 500
 Greater than 500

3. Approximately what percentage of your employees work in positions requiring international knowledge or expertise? _____ %

4. Approximately what was your firm's total U.S. dollar sales during the last fiscal year?

| | | | | |
|---|--|---|---------------------------------------|---|
| <input type="radio"/> \$250,000 or less | <input type="radio"/> \$250,000 to \$500,000 | <input type="radio"/> \$500,001 to \$1M | <input type="radio"/> \$1M - \$3M | <input type="radio"/> \$3M - \$10M |
| <input type="radio"/> \$10M - \$20M | <input type="radio"/> \$20M - \$50M | <input type="radio"/> \$50M - \$300M | <input type="radio"/> \$300M - \$1.5B | <input type="radio"/> Greater than \$1.5B |

5. Approximately what percentage of your firm's total sales was generated from international business? _____ %

6. How important or unimportant are the following regions to your **international** activities NOW and in the FUTURE (the next 10 years) for that region?

| | NOW | | | | |
|------------------|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | Not at all important | Only slightly important | Somewhat important | Important | Critically important |
| Europe | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Asia | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Latin America | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Middle East | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Africa | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other (specify): | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | FUTURE (the next 10 Years) | | | | |
| | Not at all important | Only slightly important | Somewhat important | Important | Critically important |
| Europe | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Asia | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Latin America | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Middle East | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Africa | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other (specify): | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

7. Overall, how would you say your international activities are growing in comparison to your domestic activities?

Less rapidly
 About the same
 More rapidly

8. Based on your knowledge and experience, please select the one response that best estimates your firm's international business, as a percentage of total business within the next 10 years.

| | | | |
|---|--|--|---|
| <input type="radio"/> No business will be derived internationally | <input type="radio"/> A minimal percentage of business will be derived internationally | <input type="radio"/> A significant percentage of business will be derived internationally | <input type="radio"/> A critically large percentage of business will be derived internationally |
|---|--|--|---|

CONTINUE TO NEXT PAGE

Appendix 4 (Continued)

9. For each of the following International Skills, how important or unimportant is it for your technical/occupational staff and your technical/occupational line personnel to have the following international skills?

(See page 1 for definitions of International Skills)

| <u>International Skills</u> | Technical/Occupational Staff Personnel | | | | |
|---|---|--------------------------|--------------------------|--------------------------|--------------------------|
| | Not at all important | Only slightly important | Somewhat important | Important | Critically important |
| Country socio-economic/Political Knowledge | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Appreciation of cross-cultural differences | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A global perspective | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Understanding of local market/business practices | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| International work experience | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Foreign language skills | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Understanding of International technical/occupational standards | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| <u>International Skills</u> | Technical/Occupational Line Personnel | | | | |
|---|--|--------------------------|--------------------------|--------------------------|--------------------------|
| | Not at all important | Only slightly important | Somewhat important | Important | Critically important |
| Country socio-economic/Political Knowledge | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Appreciation of cross-cultural differences | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A global perspective | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Understanding of local market/business practices | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| International work experience | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Foreign language skills | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Understanding of International technical/occupational standards | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

10. If your technical/occupational staff demonstrated more proficiency with international skills, to what degree do you feel your overall business would increase?

- To no degree at all
 To some degree
 To a large degree

11. In the past five years has your firm failed to fully capitalize on international business opportunities due to insufficient internationally skilled technical or occupational personnel?

- Yes
 No (if "No", go to question 12)

If "yes", in what way or ways has insufficient international competence among your technical/occupational personnel affected your firm? (mark all that apply)

We have.....

- missed significant marketing/business opportunities abroad.
- failed to recognize important shifts in host country policies toward foreign owned companies.
- suffered from a bias toward a United States' point of view.
- at times, failed to anticipate the needs of our international customers.
- not fully capitalized on expertise available or technological advances occurring abroad.
- Other (Please specify):

CONTINUE TO NEXT PAGE

Appendix 4 (Continued)

12. For each listed career field below, please check all boxes that describe the various education levels of your employees who have completed their high school education but do not have bachelor's degrees. MARK ALL THAT APPLY

In these fields we employ workers that have as their highest post high school education.....

| <u>Career Fields of Employees</u> | <i>...community college coursework (without an earned certificate or degree)</i> | <i>...a community college program certificate</i> | <i>....an Associate's degrees</i> | <i>... another sub-baccalaureate degree</i> |
|--|--|---|-----------------------------------|---|
| Agricultural and natural resources | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Business management | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Business support | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Communications and design | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Computer and information sciences | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Education | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Engineering, architectural, and science technologies | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Health sciences | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Marketing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Personal services | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Protective services | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Public, legal, and social services | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Trade and industry | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other (Please specify): _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other (Please specify): _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other (Please specify): _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

CONTINUE TO NEXT PAGE

Appendix 4 (Continued)

Section B - Staffing Needs and Patterns

1. Please indicate where (US or Foreign Offices) and how (US or Foreign nationals) your company currently fills technical and occupational positions in your international business operations.

| | <u>In U.S. Offices</u> | <u>In Foreign Offices</u> |
|---|--------------------------|---------------------------|
| We have no international business operations <input type="checkbox"/> | | |
| We have no foreign offices; all International operations are handled from the U.S. <input type="checkbox"/> | <input type="checkbox"/> | |
| Almost exclusively with U.S. nationals <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mostly with U.S. nationals, but with some foreign nationals <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| With a mix of U.S. and foreign nationals <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mostly with foreign nationals, but with some U.S. nationals <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Almost exclusively with foreign nationals <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. In terms of hiring, reassignment, or promotion decisions, at which occupational levels do the various international skills become an important factor in the staffing decision process? MARK ALL THAT APPLY.

See page 1 for definitions of International Skills.

| <u>International Skills</u> | <u>Entry Level</u> Technical/ Occupational <u>Staff</u> Positions | <u>Management Level</u> Technical/ Occupational <u>Staff</u> Positions | <u>Entry Level</u> Technical/ Occupational <u>Line</u> Positions | <u>Management Level</u> Technical/ Occupational <u>Line</u> Positions |
|--|--|---|---|--|
| | Country socio-economic/Political Knowledge <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Appreciation of cross-cultural differences <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A global perspective <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Understanding of local market/ business practices <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| International work experience <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Foreign language <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

3. Is it difficult for you to find U.S. nationals with the international knowledge, expertise and/or language skills needed for your firm?

- Yes No (if "No", go to question 4)

If 'yes', please identify or describe the knowledge, expertise, or skills that are difficult to find:

- Knowledge of the business culture and practices in other countries
- Comfort with working in international/multicultural groups
- International travel experience beyond a vacation
- International work experience
- Skills that meet international technical standards
- Knowledge of technical terms used in other languages
- Able to be understood in a language other than English
- Other (please describe):

4. Over the next 10 years will your company place a greater emphasis on international skills among technical/occupational managers and employees?

- Yes No

CONTINUE TO NEXT PAGE

Appendix 4 (Continued)

Section C - International Training Programs

1. Has your firm engaged in programs designed to promote international skills?

- Yes No (if "No", go to question 3)

If 'yes,' please indicate below which providers present programs to your employees. Please mark all boxes that apply:

| Type of Program | In-House Provider | Community College Provider | University Provider | Consulting Firm Provider | Non-Profit/ Government Provider |
|--|--------------------------|----------------------------|--------------------------|--------------------------|---------------------------------|
| International Cross-Cultural Seminars | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Pre-Departure training before foreign assignment | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Foreign Language Training | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Regional or Global Updates | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Multicultural Staff Management | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Cross-National Functional Teams | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| International Technical Standards | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Regional or Global Business Practices | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Have these programs you selected above met your international business needs?

- Yes (If "Yes", go to question 3) No

If 'No,' please explain why. (Mark all that apply and describe as appropriate)

- Not focused on my business needs
- Too difficult to coordinate classes and assignments
- Too expensive
- Not current to international business environment (dated information)
- Other (please describe):

3. If your firm has not used Community Colleges as a resource to assist in the development of international competencies, please explain why. (Mark all boxes that apply and provide descriptions as appropriate)

- I am not aware of what the community college can offer
- My needs are being met or exceeded elsewhere
- The community college has not met with me about my needs
- The class schedules are not flexible enough to meet my needs
- The Community College programs are too expensive
- The Community College programs are too difficult to set up
- The Community College won't/doesn't offer what my firm needs
- Other (please describe):

CONTINUE TO NEXT PAGE

Appendix 4 (Continued)

4. There has been considerable discussion about improving international education in Community College Technical and Occupational programs. Listed below are a number of specific suggestions for improving international skills content in technical and occupational programs. For each of the following Suggestions for Improvement, please indicate how important or unimportant each suggestion is to your firm's future needs:

| <u>Suggestions for Improvement</u> | Not at all important | Only slightly important | Somewhat important | Important | Critically important |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Improved academic outreach to businesses seeking greater international competence | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Creation of data banks/clearing houses on international resources | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mandatory foreign language training | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| More emphasis on exchange/overseas internship programs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| More emphasis on learning about other world areas/countries and cultures | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Stronger international emphasis in technical/occupational program curricula | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

5. What changes would you suggest for existing Community College Technical and Occupational programs to better support your global business endeavors? (Please check all that apply)

- Meet with my firm about our needs
- Be flexible in providing classes and programs
- Incorporate international skills by using presentation methods that increase international expertise
- Require more foreign language and cultural education in the curriculum
- Teach international standards and technical terms
- Increase overseas experience in the programs
- I have no suggestions for change
- Other (please describe):

6. If your local Community College established a Certificate based upon the International Skills mentioned in this questionnaire, what value would you place on the certificate for hiring or promotion decisions.

| | | | | |
|--|---|--|---------------------------------|--|
| <input type="checkbox"/> Not at all valued | <input type="checkbox"/> Only slightly valued | <input type="checkbox"/> Somewhat valued | <input type="checkbox"/> Valued | <input type="checkbox"/> Critically valued |
|--|---|--|---------------------------------|--|

7. Would your firm be willing to partner with your local Community College to develop an academic program that produced a Certificate in International Skills?

Yes

No

CONTINUE TO NEXT PAGE

Appendix 4 (Continued)
Section D - Respondent Information

1. What is the title of your position?

2. Do you have responsibility for your company's international business?

- Yes No (If "No", go to question 3)

If 'yes,' please indicate which category best represents your responsibilities:

- Responsible for the total organization
 Responsible for the organization's international endeavors
 Responsible for a specific country or region
 Responsible for a specific functional area
 Responsible for a specific technical/occupational field

3. Have you ever been assigned to work outside of the United States?

- Yes No (If "No", go to question 4)

If 'yes,' how many times have you served outside of the United States?

- Once Twice Three or more times

4. Which of the following best reflects how you perceive your career path in terms of domestic or international focus?

- Domestic Mixed international and domestic International

5. Do you speak any language other than English?

- Yes No

6. Are you involved in making international hiring and/or overseas assignment decisions?

- Yes No (If "No", go to question 7)

If 'yes,' how important or unimportant are these decisions to your success in your current position?

- Not at all important Only Slightly important Somewhat important Important Definitely important

7. What is your highest level of schooling?

-----End of Survey-----

Thank you for taking the time to complete this survey! By (Enter DATE), please mail this survey to:

Globalization in Technical/Occupational Positions:

A Community College/USF Study

C/O Ronald L. Olney
5106 Sterling Manor Drive
Tampa, FL 33647

Appendix 5

Focus Group Demographics

Business Focus Group


| | |
|---------------------------------------|-----------------------------|
| Managing Partner | Real Estate Development Co |
| Business Development Manager | Human Resource Co |
| Vice President | Investment Co |
| Process Engineering Supervisor | Engineering/Construction Co |
| Vice President Human Resources | Residential Healthcare |
| Vice President Performance & Training | Investment Co |
| Export Manager | Manufacturing Co |
| Business Development Manager | IT Services |
| Strategic Business Director | Consulting Management Co |
| General Manager | Hospitality Co |
| Staff Development Officer | Banking Institution |
| Assistant Vice President | Investment Co |

Community College Focus Group

Academic Dean, Associate of Science
Professor and Program Manager
Technical Programs Director
International Business Instructor

Appendix 6

Human Participant Protection Certificate

| |
|--|
| NCI Home Cancer Topics Clinical Trials Cancer Statistics Research & Funding News About NCI |
|  Human Participant Protections Education for Research Teams Completion Certificate |
| <p>This is to certify that Ronald Olney has completed the Human Participants Protection Education for Research Teams online course, sponsored by the National Institutes of Health (NIH), on 01/13/2008.</p> <p>This course included the following:</p> <ul style="list-style-type: none">• key historical events and current issues that impact guidelines and legislation on human participant protection in research.• ethical principles and guidelines that should assist in resolving the ethical issues inherent in the conduct of research with human participants.• the use of key ethical principles and federal regulations to protect human participants at various stages in the research process.• a description of guidelines for the protection of special populations in research.• a definition of informed consent and components necessary for a valid consent.• a description of the role of the IRB in the research process.• the roles, responsibilities, and interactions of federal agencies, institutions, and researchers in conducting research with human participants. <p style="text-align: right;">National Institutes of Health http://www.nih.gov</p> |

Appendix 7

Cover Letter for Survey Instrument

Office and Company Address

Subject: Help Needed to Better Understand How to Improve Our Community College Technical and Occupational Programs to Meet Business Needs

Greetings. I am Ron Olney, a researcher at the University of South Florida, working with the Tampa Bay Partnership. I am pleased to tell you that your company has been selected to provide feedback to community college leaders about the community college technical and occupational programs taken by your employees and applicants.

This survey is important. Tampa Bay is expanding rapidly and businesses need to ensure that the workforce is getting the training and skills needed to successfully compete in the marketplace. Your responses to this questionnaire will help ensure that educators have accurate information to help your business prosper in the future.

I respect your privacy time and your time. The name of your business and the name of the individual filling out the questionnaire are not necessary. This will help ensure that your privacy is maintained. The information collected from the questionnaire may be published, but there is no intent to identify individual businesses or respondents.

This questionnaire should be completed by an individual within your firm that is aware of current and anticipated educational needs of your business and an understanding of your client base. It will take 10 to 20 minutes to complete, depending upon the amount of discussion you wish to present. Please fill it out completely and mail it back in the self-addressed stamped envelope as soon as you are done.

If you feel that you do not have the appropriate knowledge to answer the questions, please feel free to give the questionnaire and this cover letter to the appropriate party for completion.

Thank you for your assistance in this important endeavor. Please call me at (813) 210-4363 if you have any questions.

Sincerely,
Ron Olney
Doctoral Candidate
University of South Florida, College of Education
CWY 408
Tampa, FL 33647
(813)210-4363

Appendix 8

Informed Consent Form



Informed Consent to Participate in Research

Information to Consider Before Taking Part in this Research Study

Researchers at the University of South Florida (USF) study many topics. To do this, we need the help of people who agree to take part in a research study. This form tells you about this research study.

We are asking you to take part in a research study that is called: U.S. Business Needs for Technical/Occupational Employees with International Expertise: A Needs Assessment in the Tampa Bay Economic Zone.

The person who is in charge of this research study is Ronald L. Olney. He is called the Principal Investigator and he is a Ph D. candidate at the University of South Florida. This project is his dissertation and he will be collecting the data by himself on this project.

The research will be done in small group meetings in the Tampa Bay area.

Purpose of the study: The purpose of this study is to conduct a needs assessment in the Tampa Bay Economic Zone to determine whether international skills are considered important for employment entry or movement, and if considered important, then to determine where businesses obtain training in international skills. In addition, this study will garner business recommendations for the improvement of international skills education in community college occupational and technical programs.

Study Procedures

If you take part in this study, you will be asked to Gather with 5-10 other interested participants in a meeting room at the University of South Florida or other convenient location and listen to a 15-20 minute presentation of the results of a survey conducted with businesses in the Tampa Bay Economic Zone. After the presentation, participants will be asked to join in an oral discussion about the survey results in order for the principal investigator to better understand how the results may affect practice. General conclusions of the discussion will be visually displayed and participants will be able to modify them. There will be audio recording of the discussion to ensure that salient points are kept in context by the researcher. Conclusions and discussion points from the group will be used to provide additional insights and context to the results and recommendations sections of the study. The entire period of participation is expected to last sixty to ninety minutes, depending upon discussion activity.

Alternatives

You have the alternative to choose not to participate in this research study.

Benefits

The potential benefit to you is greater insight into international skills and the effects of globalization on the Tampa Bay Economic Zone.

Risks or Discomfort

There are no known risks to those who take part in this study.

Appendix 8 (Continued)

Informed Consent Form

Compensation

We will not pay you for the time you volunteer while being in this study.

Confidentiality

We must keep your study records confidential. All records from this meeting to include this consent form and the written general conclusions will be stored in a locked container when not being actively used by the investigator. The audio recording will be used in a single occupant room and will be stored in a locked container when not being actively used by the investigator. Excerpts from the general conclusions and audio tapes will be used in the dissertation and subsequent publications. No individual names of participants will be used in the dissertation or subsequent publications. All records, to include the audio tape will be destroyed within 2 years of this date.

However, certain people may need to see your study records. By law, anyone who looks at your records must keep them completely confidential. The only people who will be allowed to see these records are:

- The research team, including the Principal Investigator, the Dissertation Chair and Dissertation Committee Members, and
- the University of South Florida Institutional Review Board (IRB) and the staff that work for the IRB. Other individuals who work for USF that provide other kinds of oversight may also need to look at your records.

We may publish what we learn from this study. If we do, we will not let anyone know your name. We will not publish anything else that would let people know who you are.

Voluntary Participation / Withdrawal

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study, to please the investigator or the research staff. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this study

New information about the study

During the course of this study, we may find more information that could be important to you. This includes information that, once learned, might cause you to change your mind about being in the study. We will notify you as soon as possible if such information becomes available.

Questions, concerns, or complaints

If you have any questions, concerns or complaints about this study, call *Ronald L. Olney* at 813- 210-4363.

If you have questions about your rights as a participant in this study, general questions, or have complaints, concerns or issues you want to discuss with someone outside the research, call the Division of Research Integrity and Compliance of the University of South Florida at (813) 974-9343.

If you experience an adverse event or unanticipated problem call *Ronald L. Olney* at 813-210-4363.

Appendix 8 (Continued)

Informed Consent Form

Consent to Take Part in this Research Study

It is up to you to decide whether you want to take part in this study. If you want to take part, please sign the form, if the following statements are true.

I freely give my consent to take part in this study. I understand that by signing this form I am agreeing to take part in research. I have received a copy of this form to take with me.

Signature of Person Taking Part in Study

Date

Printed Name of Person Taking Part in Study

Statement of Person Obtaining Informed Consent

I have carefully explained to the person taking part in the study what he or she can expect.

I hereby certify that when this person signs this form, to the best of my knowledge, he or she understands:

- What the study is about.
- What procedures/interventions/investigational drugs or devices will be used.
- What the potential benefits might be.
- What the known risks might be.

I also certify that he or she does not have any problems that could make it hard to understand what it means to take part in this research. This person speaks the language that was used to explain this research.

This person reads well enough to understand this form or, if not, this person is able to hear and understand when the form is read to him or her.

This person does not have a medical/psychological problem that would compromise comprehension and therefore makes it hard to understand what is being explained and can, therefore, give informed consent.

This person is not under any type of anesthesia or analgesic that may cloud their judgment or make it hard to understand what is being explained and, therefore, can be considered competent to give informed consent.

Signature of Person Obtaining Informed Consent

Date

Printed Name of Person Obtaining Informed Consent

Appendix 9

Open Ended Questions for Focus Groups

1. What are your thoughts on the list of international skills presented?
2. What do you think about the survey results on whether international skills are important for the sub-baccalaureate technical and occupational employees?
3. What do you think about the survey results on how or whether to engage sub-baccalaureate technical and occupational employees in training programs to develop international skills?
4. What do you think about the survey results and if U.S. community college technical and occupational degree programs should change with respect to their international skills objectives?
5. What do you believe local community colleges should do with these results?
6. What do you believe the Tampa Bay business community at large should do with these results?

Appendix 10

Request to Use the Kedia and Daniel Survey

From: bkedia@memphis.edu [mailto:bkedia@memphis.edu]
Sent: Saturday, October 28, 2006 20:18 PM
To: Olney, Ron
Subject: RE: Request for Help: U.S. Business Needs for Employees with International Expertise

Dear Mr. Olney,

Dr. Dellow and I talked briefly about my study. You are welcome to use the instrument we developed. Unfortunately, due to time constraint, we did not do any reliability and validity testing on our instruments. The results of the study are available on Duke University website under some Global Conference (I forget the exact title).

Next week, I am planning to leave for India and therefore at this time, I may not be able to help you much. Thank you for your interest. Good luck to you.

Ben L. Kedia, Ph.D.
Wang Professor of Int'l Business
Director, Wang CIBER
The University of Memphis
220 Fogelman Executive Center
330 Innovation Drive
Memphis, TN 38152-3130
T: 901-678-2805
F: 901-678-3678

From: Olney, Ron [mailto:olney@jmslc.usf.edu]
Sent: Thursday, October 26, 2006 9:51 AM
To: Benwari L Kedia (bkedia)
Subject: Request for Help: U.S. Business Needs for Employees with International Expertise

Dr Kedia:

I am Ron Olney, a doctoral candidate working with Dr. Dellow at the University of South Florida. I intend to extend your research on U.S. Business Needs for Employees with International Expertise by addressing the Tampa Bay Business Community and Community College Technical/Occupational programs. Dr. Dellow tells me that he spoke to you earlier this month when you were at the University of South Florida. He also stated that you gave us permission to use your questionnaire. I am very excited to start this project and I would like to confirm that I may use your questionnaire.

In addition, I am interested in knowing more about your instrument development, instrument validation and any reliability data that you may have garnered. I look forward to corresponding with you on this topic. Thank you for your time and consideration.

Thank you. Sincerely, Ron Olney, PhD (Candidate)

Appendix 11

U.S. Business Needs for Technical/Occupational Employees with International Expertise

A survey of business needs for technical/occupational employees with international business knowledge, skills, and experience

PURPOSE

This survey will be used to help educators know if business conditions have changed the training/educational needs of your employees and if the need for international skills has filtered down to employee positions that require occupational and technical expertise. International skills may be important soft skills for both international and domestic business endeavors.

INSTRUCTIONS

This survey will take approximately 20 minutes to complete. Please fill out the survey by answering each question accurately using a dark pencil or pen and return the completed survey in the enclosed envelope by August 1, 2007.

GLOSSARY OF TERMS

International Skills:

Knowledge of a country's socio-economic and political structures (Awareness of the social, economic and political structures and institutions within foreign countries that are or may be of business interest to your firm),

Appreciation of cross-cultural differences (An understanding that there are cultural differences throughout the U.S. and the world and that these differences are opportunities for business growth and enriched economic relationships through the leveraging of multiple perspectives and adaptability),

A global perspective (An ability to consider the interdependence of actions across the planet. This perspective allows individuals to consider and integrate the impacts of international actions on the local environment, as well as the impacts of local actions on the rest of the world),

Understanding of local market/business practices (An understanding of the actual way business is successfully conducted in country/cultural settings of interest),

International work experience (An individual's history of conducting business activities outside of the United States. This activity could be classified as being physically posted outside of the U.S. and living for a period of time on foreign soil, or as occupying a position in the U.S. that requires direct work in the international arena),

Foreign language skills (Degrees of understanding of a written or spoken language, not English, as well as the degrees of ability to concisely translate the intent and meaning of non-English languages between each other and with English) and,

Understanding of International technical/occupational standards (Knowledge and understanding of accepted international standards within one's technical/occupational field).

Line Personnel: Managers or employees working in primary revenue generating units in support of the organizational mission.

Staff Personnel: Managers or employees working in positions that are ancillary to the primary generating positions.

Thank you!

CONTINUE TO NEXT PAGE

Appendix 11 (Continued)

Section A - Company Profile and International Activities

1. Which one of the following U.S. Government categories best describes your firm? (Clearly mark one)

| | | |
|--|--|---|
| <input type="radio"/> Manufacturing Firm | <input type="radio"/> Accommodations/Food Services | <input type="radio"/> Health Care, Social Assistance Services |
| <input type="radio"/> Financial/ Insurance Services | <input type="radio"/> Retail Firm | <input type="radio"/> Construction |
| <input type="radio"/> Professional, Scientific, Technical services | <input type="radio"/> Wholesale Trade | <input type="radio"/> Other (specify) _____ |

2. Approximately how many employees does your company currently employ?

10 or less
 11 - 20
 21 - 39
 40 - 80
 81 - 120
 121 - 215
 216 - 500
 Greater than 500

3. Approximately what percentage of your employees work in positions requiring international knowledge or expertise?

_____ %

4. Approximately what was your firm's total U.S. dollar sales during the last fiscal year?

| | | | | |
|---|--|---|---------------------------------------|---|
| <input type="radio"/> \$250,000 or less | <input type="radio"/> \$250,000 to \$500,000 | <input type="radio"/> \$500,001 to \$1M | <input type="radio"/> \$1M - \$3M | <input type="radio"/> \$3M - \$10M |
| <input type="radio"/> \$10M - \$20M | <input type="radio"/> \$20M - \$50M | <input type="radio"/> \$50M - \$300M | <input type="radio"/> \$300M - \$1.5B | <input type="radio"/> Greater than \$1.5B |

5. Approximately what percentage of your firm's total sales was generated from international business?

_____ %

6. How important or unimportant are the following regions to your **international** activities NOW and in the FUTURE (the next 10 years) for that region?

| | NOW | | | | |
|------------------|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | Not at all important | Only slightly important | Somewhat important | Important | Critically important |
| Europe | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Asia | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Latin America | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Middle East | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Africa | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other (specify): | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | FUTURE (the next 10 Years) | | | | |
| | Not at all important | Only slightly important | Somewhat important | Important | Critically important |
| Europe | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Asia | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Latin America | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Middle East | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Africa | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other (specify): | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

7. Overall, how would you say your international activities are growing in comparison to your domestic activities?

Less rapidly
 About the same
 More rapidly

8. Based on your knowledge and experience, please select the one response that best estimates your firm's international business, as a percentage of total business within the next 10 years.

| | | | |
|---|--|--|---|
| <input type="radio"/> No business will be derived internationally | <input type="radio"/> A minimal percentage of business will be derived internationally | <input type="radio"/> A significant percentage of business will be derived internationally | <input type="radio"/> A critically large percentage of business will be derived internationally |
|---|--|--|---|

CONTINUE TO NEXT PAGE

Appendix 11 (Continued)

9. For each of the following International Skills, how important or unimportant is it for your technical/occupational staff and your technical/occupational line personnel to have the following international skills?

(See page 1 for definitions of International Skills)

| <u>International Skills</u> | Technical/Occupational Staff Personnel | | | | |
|---|---|--------------------------|--------------------------|--------------------------|--------------------------|
| | Not at all important | Only slightly important | Somewhat important | Important | Critically important |
| Country socio-economic/Political Knowledge | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Appreciation of cross-cultural differences | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A global perspective | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Understanding of local market/business practices | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| International work experience | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Foreign language skills | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Understanding of International technical/occupational standards | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| <u>International Skills</u> | Technical/Occupational Line Personnel | | | | |
|---|--|--------------------------|--------------------------|--------------------------|--------------------------|
| | Not at all important | Only slightly important | Somewhat important | Important | Critically important |
| Country socio-economic/Political Knowledge | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Appreciation of cross-cultural differences | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A global perspective | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Understanding of local market/business practices | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| International work experience | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Foreign language skills | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Understanding of International technical/occupational standards | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

10. If your technical/occupational staff demonstrated more proficiency with international skills, to what degree do you feel your overall business would increase?

- To no degree at all
 To some degree
 To a large degree

11. In the past five years has your firm failed to fully capitalize on international business opportunities due to insufficient internationally skilled technical or occupational personnel?

- Yes
 No (*if "No", go to question 12*)

If "yes", in what way or ways has insufficient international competence among your technical/occupational personnel affected your firm? (mark all that apply)

We have.....

- missed significant marketing/business opportunities abroad.
- failed to recognize important shifts in host country policies toward foreign owned companies.
- suffered from a bias toward a United States' point of view.
- at times, failed to anticipate the needs of our international customers.
- not fully capitalized on expertise available or technological advances occurring abroad.
- Other (Please specify):

CONTINUE TO NEXT PAGE

Appendix 11 (Continued)

12. For each listed career field below, please check all boxes that describe the various education levels of your employees who have completed their high school education but do not have bachelor's degrees. MARK ALL THAT APPLY

In these fields we employ workers that have as their highest post high school education.....

| Career Fields of Employees | <i>...community college coursework (without an earned certificate or degree)</i> | <i>...a community college program certificate</i> | <i>....an Associate's degrees</i> | <i>... another sub-baccalaureate degree</i> |
|--|--|---|-----------------------------------|---|
| Agricultural and natural resources | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Business management | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Business support | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Communications and design | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Computer and information sciences | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Education | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Engineering, architectural, and science technologies | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Health sciences | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Marketing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Personal services | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Protective services | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Public, legal, and social services | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Trade and industry | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other (Please specify): _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other (Please specify): _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other (Please specify): _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

CONTINUE TO NEXT PAGE

Appendix 11 (Continued)

Section B - Staffing Needs and Patterns

1. Please indicate where (US or Foreign Offices) and how (US or Foreign nationals) your company currently fills technical and occupational positions in your international business operations.

| | <u>In US Offices</u> | <u>In Foreign Offices</u> |
|--|--------------------------|---------------------------|
| We have no international business operations | <input type="checkbox"/> | |
| We have no foreign offices; all International operations are handled from the U.S. | <input type="checkbox"/> | |
| Almost exclusively with U.S. nationals | <input type="checkbox"/> | <input type="checkbox"/> |
| Mostly with U.S. nationals, but with some foreign nationals | <input type="checkbox"/> | <input type="checkbox"/> |
| With a mix of U.S. and foreign nationals | <input type="checkbox"/> | <input type="checkbox"/> |
| Mostly with foreign nationals, but with some U.S. nationals | <input type="checkbox"/> | <input type="checkbox"/> |
| Almost exclusively with foreign nationals | <input type="checkbox"/> | <input type="checkbox"/> |

2. In terms of hiring, reassignment, or promotion decisions, at which occupational levels do the various international skills become an important factor in the staffing decision process? MARK ALL THAT APPLY.

See page 1 for definitions of International Skills.

| <u>International Skills</u> | <u>Entry Level</u> Technical/ Occupational <u>Staff</u> Positions | <u>Management Level</u> Technical/ Occupational <u>Staff</u> Positions | <u>Entry Level</u> Technical/ Occupational <u>Line</u> Positions | <u>Management Level</u> Technical/ Occupational <u>Line</u> Positions |
|---|--|---|---|--|
| | Country socio-economic/Political Knowledge | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Appreciation of cross-cultural differences | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A global perspective | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Understanding of local market/ business practices | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| International work experience | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Foreign language | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

3. Is it difficult for you to find U.S. nationals with the international knowledge, expertise and/or language skills needed for your firm?

- Yes
 No (if "No", go to question 4)

If 'yes', please identify or describe the knowledge, expertise, or skills that are difficult to find:

- Knowledge of the business culture and practices in other countries
- Comfort with working in international/multicultural groups
- International travel experience beyond a vacation
- International work experience
- Skills that meet international technical standards
- Knowledge of technical terms used in other languages
- Able to be understood in a language other than English
- Other (please describe):

4. Over the next 10 years will your company place a greater emphasis on international skills among technical/occupational managers and employees?

- Yes
 No

CONTINUE TO NEXT PAGE

Appendix 11 (Continued)

Section C - International Training Programs

1. Has your firm engaged in programs designed to promote international skills?

Yes

No (if "No", go to question 2)

If 'yes,' please indicate below which providers present programs to your employees. Please mark all boxes that apply:

| Type of Program | In-House Provider | Community College Provider | University Provider | Consulting Firm Provider | Non-Profit/ Government Provider |
|--|--------------------------|----------------------------|--------------------------|--------------------------|---------------------------------|
| International Cross-Cultural Seminars | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Pre-Departure training before foreign assignment | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Foreign Language Training | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Regional or Global Updates | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Multicultural Staff Management | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Cross-National Functional Teams | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| International Technical Standards | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Regional or Global Business Practices | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Have these programs you selected above met your international business needs?

Yes (If "Yes", go to question 3)

No

If 'No,' please explain why. (Mark all that apply and describe as appropriate)

- Not focused on my business needs
- Too difficult to coordinate classes and assignments
- Too expensive
- Not current to international business environment (dated information)
- Other (please describe):

3. If your firm has not used Community Colleges as a resource to assist in the development of international competencies, please explain why. (Mark all boxes that apply and provide descriptions as appropriate)

- I am not aware of what the community college can offer
- My needs are being met or exceeded elsewhere
- The community college has not met with me about my needs
- The class schedules are not flexible enough to meet my needs
- The Community College programs are too expensive
- The Community College programs are too difficult to set up
- The Community College won't/doesn't offer what my firm needs
- Other (please describe):

CONTINUE TO NEXT PAGE

Appendix 11 (Continued)

4. There has been considerable discussion about improving international education in Community College Technical and Occupational programs. Listed below are a number of specific suggestions for improving international skills content in technical and occupational programs. For each of the following Suggestions for Improvement, please indicate how important or unimportant each suggestion is to your firm's future needs:

| <u>Suggestions for Improvement</u> | Not at all important | Only slightly important | Somewhat important | Important | Critically important |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Improved academic outreach to businesses seeking greater international competence | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Creation of data banks/clearing houses on international resources | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mandatory foreign language training | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| More emphasis on exchange/overseas internship programs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| More emphasis on learning about other world areas/countries and cultures | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Stronger international emphasis in technical/occupational program curricula | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

5. What changes would you suggest for existing Community College Technical and Occupational programs to better support your global business endeavors? (Please check all that apply)

- Meet with my firm about our needs
- Be flexible in providing classes and programs
- Incorporate international skills by using presentation methods that increase international expertise
- Require more foreign language and cultural education in the curriculum
- Teach international standards and technical terms
- Increase overseas experience in the programs
- I have no suggestions for change
- Other (please describe):

6. If your local Community College established a Certificate based upon the International Skills mentioned in this questionnaire, what value would you place on the certificate for hiring or promotion decisions.

| | | | | |
|--|---|--|---------------------------------|--|
| <input type="checkbox"/> Not at all valued | <input type="checkbox"/> Only slightly valued | <input type="checkbox"/> Somewhat valued | <input type="checkbox"/> Valued | <input type="checkbox"/> Critically valued |
|--|---|--|---------------------------------|--|

7. Would your firm be willing to partner with your local Community College to develop an academic program that produced a Certificate in International Skills?

Yes
 No

CONTINUE TO NEXT PAGE

Section D - Respondent Information

1. What is the title of your position?

2. Do you have responsibility for your company's international business?

- Yes No (If "No", go to question 3)

If 'yes,' please indicate which category best represents your responsibilities:

- Responsible for the total organization
 Responsible for the organization's international endeavors
 Responsible for a specific country or region
 Responsible for a specific functional area
 Responsible for a specific technical/occupational field

3. Have you ever been assigned to work outside of the United States?

- Yes No (If "No", go to question 4)

If 'yes,' how many times have you served outside of the United States?

- Once Twice Three or more times

4. Which of the following best reflects how you perceive your career path in terms of domestic or international focus?

- Domestic Mixed international and domestic International

5. Do you speak any language other than English?

- Yes No

6. Are you involved in making international hiring and/or overseas assignment decisions?

- Yes No (If "No", go to question 7)

If 'yes,' how important or unimportant are these decisions to your success in your current position?

- Not at all important Only Slightly important Somewhat important Important Definitely important

7. What is your highest level of schooling?

-----End of Survey-----

Thank you for taking the time to complete this survey. By March 16, 2007, please mail this survey to:

Globalization in Technical/Occupational Positions:

A Community College/USF Study

C/O Ronald L. Olney

5106 Sterling Manor Drive

Tampa, FL 33647

*** If you would be willing to discuss international skills with me in the future, please include contact information with this survey (Name and telephone, e-mail and/or direct mail addresses).*

Appendix 12

Questionnaire Advisors and Validity Subject Matter Experts

Questionnaire Advisors:

Bill Hunter, PhD. Professor, LeHigh University. Representative to the United Nations.

Director of the Global Union, Director of the Office of International Students and Scholars. Current academic focus: Curriculum development and global competence.

Chris Pinkney, MBA, Entrepreneur, Business Owner.

David Ortinau, PhD, Professor of Marketing and Market Research, University of South Florida College of Business.

Validity Subject Matter Experts:

Larry Hanson, Business Intelligence Officer, Tampa Bay Partnership, Tampa, FL.

Resume includes Community College Instructor, Business Owner and City Manager.

Maria Crummett, PhD. Dean of International Affairs, College of Arts and Sciences, University of South Florida.

Laura Berkowitz, Senior Research Manager, Department of Economic Development, Pinellas County, FL. Resume includes Community College Instructor.

Appendix 13

Survey Questions by Construct Question

1. DEMOGRAPHICS: What are the demographics of businesses and respondents that complete this instrument?

| 1 | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 | A12 | B1 | D1 | D2 | D3 | D4 | D5 | D6 | D7 | AVE |
|-----------|-----|------|------|------|-----|------|-----|------|------|------|------|------|-----|------|------|------|------|------|
| Relevance | 4.0 | 4.0 | 3.67 | 4.0 | 4.0 | 4.0 | 4.0 | 3.68 | 3.33 | 3.33 | 3.67 | 3.67 | 4.0 | 3.67 | 3.67 | 4.0 | 3.67 | 3.79 |
| Clarity | 4.0 | 3.67 | 3.67 | 3.67 | 4.0 | 3.67 | 4.0 | 3.33 | 3.0 | 3.67 | 4.0 | 3.67 | 4.0 | 3.67 | 4.0 | 3.67 | 3.67 | 3.73 |

2. SKILLS: What international skills do U.S. executives believe are important for the sub-baccalaureate technical and occupational employees that they hire and promote?

| 2 | A9 | A10 | A11 | B2 | B3 | B4 | AVE | |
|-----------|------|------|------|------|-----|------|------|------|
| Relevance | 4.0 | 4.0 | 3.67 | 3.67 | 4.0 | 4.0 | 3.89 | 3.89 |
| Clarity | 3.67 | 3.67 | 3.33 | 3.33 | 4.0 | 3.67 | 3.61 | 3.61 |

3. TRAINING: How do U.S. executives engage their companies' sub-baccalaureate technical and occupational employees in training programs to develop international skills?

| 3 | C1 | C2 | C6 | AVE | |
|-----------|-----|-----|-----|-----|-----|
| Relevance | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Clarity | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |

4. IMPROVEMENT: In what ways do executives think U.S. community college technical and occupational degree programs should change with respect to their international skills objectives?

| 4 | C3 | C4 | C5 | C7 | AVE | |
|-----------|------|------|------|-----|------|------|
| Relevance | 3.67 | 3.67 | 4.0 | 4.0 | 3.84 | 3.84 |
| Clarity | 3.33 | 3.33 | 3.67 | 4.0 | 3.58 | 3.58 |

4 = Highly Relevant/ Very Clear, 3 = Relevant/Clear, 2 = Not Relevant/ Not Clear, 1 = Highly Irrelevant/ Highly Unclear

Appendix 14

IRB Approval for Pilot Study



March 21, 2007

Ronald L. Olney, MA
5106 Sterling Manor Dr.
Tampa, FL 33647

RE: **Exempt Certification** for IRB#: 105603 (I)

Title: *Tampa Bay Business Needs for Occupational/Technical Employees with International Expertise: A Pilot Study*

Dear Mr. Olney:

On March 21, 2007, the Institutional Review Board (IRB) determined that your research **meets USF requirements and Federal Exemption criteria 2; research involving the use of educational tests survey procedures, interview procedures or observation of public behavior.** It is your responsibility to ensure that this research is conducted in a manner reported in your application and consistent with the ethical principles outlined in the Belmont Report and with USF IRB policies and procedures.

Please note that changes to this protocol may disqualify it from exempt status. It is your responsibility to notify the IRB prior to implementing any changes.

The Division of Research Integrity and Compliance will hold your exemption application for a period of five years from the date of this letter or for three years after a Final Progress Report is received. If you wish to continue this protocol beyond those periods, you will need to submit an Exemption Certification Request form at least 30 days before this exempt certification ends. If a Final Progress Report has not been received, the IRB will send you a reminder notice prior to end of the five year period; therefore, it is important that you keep your contact information current with the IRB Office. Should you complete this study prior to the end of the five-year period, you must submit a Final IRB Progress Report for review.

Please reference the above IRB protocol number in all correspondence to the IRB c/o the Division of Research Integrity and Compliance. In addition, we have enclosed an Institutional Review Board (IRB) Quick Reference Guide providing guidelines and resources to assist you in meeting your responsibilities when conducting human subjects research. **Please read this guide carefully.**

OFFICE OF RESEARCH • DIVISION OF RESEARCH INTEGRITY & COMPLIANCE
INSTITUTIONAL REVIEW BOARDS, FWA No. 00001669
University of South Florida • 12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799
(813) 974-5638 • Fax (813) 974-5618

Appendix 14 (Continued)

IRB Approval for Pilot Study

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-9343.

Sincerely,



Paul G. Stiles, J.D., Ph.D., Chairperson
USF Institutional Review Board

Enclosures: [IRB Quick Reference Guide](#)

Cc: Various B. Menzel, USF IRB Professional Staff
Donald A. Dellow, Ed.D

SB-EXEMPT-0602

Appendix 15

Chi Squared Goodness of Fit for Business Type, Business Size and Business Sales

| POPTYPEA1 | POPTYPEA1 | | | | RESPTYPEA1 | | SAMTYPEA1 | | Pop vs. Resp | Pop vs. Sam |
|-----------|-----------|---------|-----------|---------|------------|---------|-----------|---------|--------------|-------------|
| | Frequency | Percent | Frequency | Percent | Frequency | Percent | Frequency | Percent | | |
| 1 | 3001 | 4.82 | 3001 | 4.82 | 1 | 5 | 7 | 7 | 6.72199E-05 | 0.009859751 |
| 2 | 6579 | 10.56 | 9580 | 15.38 | 3 | 15 | 12 | 12 | 0.018668182 | 0.001963636 |
| 3 | 7385 | 11.85 | 16965 | 27.23 | 5 | 25 | 12 | 12 | 0.14592616 | 1.89873E-05 |
| 4 | 7575 | 12.16 | 24540 | 39.39 | 1 | 5 | 13 | 13 | 0.042159211 | 0.000580263 |
| 5 | 14686 | 23.57 | 39226 | 62.96 | 5 | 25 | 26 | 26 | 0.000867586 | 0.002505261 |
| 6 | 4725 | 7.58 | 43951 | 70.55 | 2 | 10 | 10 | 10 | 0.007726121 | 0.007726121 |
| 7 | 4972 | 7.98 | 48923 | 78.53 | 2 | 10 | 8 | 8 | 0.005113283 | 5.01253E-07 |
| 8 | 3803 | 6.1 | 52726 | 84.63 | 1 | 5 | 6 | 6 | 0.001983607 | 1.63934E-05 |
| 9 | 9573 | 15.37 | 62299 | 100 | 0 | 0 | 6 | 6 | 0.1537 | 0.057122251 |
| | | | | | | | | | | Chi-Square |
| | | | | | | | | | | 7.524227393 |
| | | | | | | | | | | Chi-Square |
| | | | | | | | | | | 7.979316603 |
| POPSIZEA2 | POPSIZEA2 | | | | RESPSIZEA2 | | SAMSIZEA2 | | Pop vs. Resp | Pop vs. Sam |
| | Frequency | Percent | Frequency | Percent | Frequency | Percent | Frequency | Percent | | |
| 1 | 33956 | 54.52 | 33956 | 54.52 | 9 | 45 | 59 | 59 | 0.016623331 | 0.003681291 |
| 2 | 14437 | 23.18 | 48393 | 77.7 | 7 | 35 | 19 | 19 | 0.060272821 | 0.007537705 |
| 3 | 6716 | 10.78 | 55109 | 88.49 | 2 | 10 | 12 | 12 | 0.000564378 | 0.001380705 |
| 4 | 3726 | 5.98 | 58835 | 94.47 | 0 | 0 | 8 | 8 | 0.0598 | 0.006823411 |
| 5 | 1476 | 2.37 | 60311 | 96.84 | 1 | 5 | 0 | 0 | 0.029185232 | 0.0237 |
| 6 | 1187 | 1.91 | 61498 | 98.74 | 0 | 0 | 1 | 1 | 0.0191 | 0.004335602 |
| 7 | 572 | 0.92 | 62070 | 99.66 | 1 | 5 | 0 | 0 | 0.18093913 | 0.0092 |
| 8 | 210 | 0.34 | 62280 | 100 | 0 | 0 | 1 | 1 | 0.0034 | 0.012811765 |
| | | | | | | | | | | Chi-Square |
| | | | | | | | | | | 7.397697865 |
| | | | | | | | | | | Chi-Square |
| | | | | | | | | | | 6.947047937 |

Appendix 15 (Continued)

Chi Squared Goodness of Fit for Business Type, Business Size and Business Sales

| POPSALES4 | POPSALES4 | | | | RESPSALES4 | | SAMSALES4 | | Pop vs. Resp | Pop vs. Sam | | |
|-----------|-----------|---------|-----------|---------|------------|---------|-----------|---------|--------------|-------------|------------|------------|
| | Frequency | Percent | Frequency | Percent | Frequency | Percent | Frequency | Percent | | | | |
| 1 | 1686 | 3.08 | 1686 | 3.08 | 1 | 5 | 2 | 2.11 | 0.011968831 | 0.00305487 | | |
| 2 | 4800 | 8.76 | 6486 | 11.84 | 3 | 15 | 7 | 7.37 | 0.044449315 | 0.002205594 | | |
| 3 | 11585 | 21.15 | 18071 | 32.99 | 5 | 25 | 31 | 32.63 | 0.007008274 | 0.062312246 | | |
| 4 | 18300 | 33.41 | 36371 | 66.4 | 5 | 25 | 28 | 29.47 | 0.02116974 | 0.004646393 | | |
| 5 | 13542 | 24.72 | 49913 | 91.13 | 4 | 20 | 20 | 21.05 | 0.009012298 | 0.005448584 | | |
| 6 | 2276 | 4.16 | 52189 | 95.28 | 0 | 0 | 3 | 3.16 | 0.0416 | 0.002403846 | | |
| 7 | 1657 | 3.03 | 53846 | 98.31 | 1 | 5 | 2 | 2.11 | 0.012808251 | 0.002793399 | | |
| 8 | 861 | 1.57 | 54707 | 99.88 | 1 | 5 | 2 | 2.11 | 0.074935669 | 0.001857325 | | |
| 9 | 49 | 0.09 | 54756 | 99.97 | 0 | 0 | 0 | 0 | 0.0009 | 0.0009 | | |
| 10 | 17 | 0.03 | 54773 | 100 | 0 | 0 | 0 | 0 | 0.0003 | 0.0003 | | |
| | | | | | | | | | 4.483047548 | Chi-Square | 8.16261445 | Chi-Square |

Appendix 16

Test-Retest Reliability Participants for Pilot Study

| Participant | Title | Business Type | # Employees | US Sales \$ |
|-------------|------------|--|------------------|---------------------|
| 1 | Supervisor | Manufacturing Firm | Greater than 500 | Greater than \$1.5B |
| 2 | President | Professional, Scientific, Technical Services | 10 or less | \$250,000 or less |
| 3 | Owner | Retail Firm | 11 - 20 | \$1M - \$2.5M |
| 4 | CEO | Wholesale Trade | 10 or less | \$500,000 to \$1M |
| 5 | Owner | Construction | 40 - 80 | \$2.5M - \$10M |
| 6 | Partner | Professional, Scientific, Technical Services | 11 - 20 | \$2.5M - \$10M |

Appendix 17

Pilot Test Retest Answers that Differed

| Study Question | Survey Question | Number Pairs Differ | Total Pairs | % Different |
|----------------|-----------------|---------------------|-------------|-------------|
| 1 | | 8 | 660 | 1.2 |
| 1 | A3 | 1 | 6 | 16.7 |
| 1 | A6 | 5 | 72 | 6.9 |
| 1 | A12 | 1 | 384 | 0.3 |
| 1 | D4 | 1 | 6 | 16.7 |
| 2 | | 11 | 336 | 3.3 |
| 2 | A9 | 9 | 84 | 10.7 |
| 2 | B3 | 2 | 54 | 3.7 |
| 3 | | 4 | 288 | 1.4 |
| 3 | C1 | 1 | 246 | 0.4 |
| 3 | C2 | 1 | 36 | 2.8 |
| 3 | C6 | 2 | 6 | 33.3 |
| 4 | | 6 | 138 | 4.3 |
| 4 | C3 | 4 | 48 | 8.3 |
| 4 | C4 | 2 | 36 | 5.6 |
| TOTAL | 11 | 29 | 1422 | 2.0 |

Appendix 18

Pilot Test-Retest Respondent Changes and Direction

| Survey Question Changes | Study Question Changes | Changes per Respondent | Change and Direction for Likert-like answers | Description of Dichotomous scale changes | Relationship of Changes to center of Likert-like scale |
|----------------------------|---|--|--|--|--|
| 11 Survey questions change | Question 1: 8 changes Question 2: 11 changes Question 3: 4 changes Question 4: 6 changes | Respondent 1 – 3 changes Respondent 2 – 9 changes Respondent 3 – 4 changes Respondent 4 – 5 changes Respondent 5 – 5 changes Respondent 6 – 3 changes | 15 changed positive 3 changed negative | 5 changed No to Yes 4 changed Yes to No | 11 toward center 6 away from center 1 through center |

Appendix 19

Initial and 11day Post Card Notices

Dear Sir/Ms.

In the next few days I will mail and envelope to you with a survey questionnaire inside that is titled “The Olney Survey for U.S. Business Needs for Technical/Occupational Employees with International Expertise”. This survey is important to the continued business growth of Tampa Bay.

Please be looking for the questionnaire and promptly complete and return it in the pre-addressed envelope. If for any reason you do not receive the survey, please call me at (813)210-4363 and I will send another copy to you.

Thank you very much for your assistance.

Sincerely, Ron Olney

MPA, PhD (Candidate),
Researcher
University of South Florida

Dear Sir/Ms.

A few weeks ago I sent an envelope to you with a survey questionnaire inside that is titled “The Olney Survey for U.S. Business Needs for Technical/Occupational Employees with International Expertise”. This survey is important to the continued business growth of Tampa Bay.

If you have not already completed and returned the questionnaire, PLEASE do so. This will ensure that the businesses that you represent have a voice in the outcomes.

If you have already returned your completed survey – THANK YOU!! If you did not receive a copy of the survey or have misplaced it, please call me at (813)210-4363 and I will send another copy to you. Thank you very much for your assistance.

Sincerely, Ron Olney

MPA, PhD (Candidate),
Researcher
University of South Florida

Appendix 20

Cover Letter for Survey Instrument

Office and Company Address

Subject: Help Needed to Better Understand How to Improve Our Community College Technical and Occupational Programs to Meet Business Needs

Greetings. I am Ron Olney, a researcher at the University of South Florida, working with the Tampa Bay Partnership. I am pleased to tell you that your company has been selected to provide feedback to community college leaders about the community college technical and occupational programs taken by your employees and applicants.

This survey is important. Tampa Bay is expanding rapidly and businesses need to ensure that the workforce is getting the training and skills needed to successfully compete in the marketplace. Your responses to this questionnaire will help ensure that educators have accurate information to help your business prosper in the future.

I respect your privacy time and your time. The name of your business and the name of the individual filling out the questionnaire are not necessary. This will help ensure that your privacy is maintained. The information collected from the questionnaire may be published, but there is no intent to identify individual businesses or respondents.

This questionnaire should be completed by an individual within your firm that is aware of current and anticipated educational needs of your business and an understanding of your client base. It will take 10 to 20 minutes to complete, depending upon the amount of discussion you wish to present. Please fill it out completely and mail it back in the self-addressed stamped envelope as soon as you are done.

If you feel that you do not have the appropriate knowledge to answer the questions, please feel free to give the questionnaire and this cover letter to the appropriate party for completion.

Thank you for your assistance in this important endeavor. Please call me at (813) 210-4363 if you have any questions.

Sincerely,
Ron Olney
Doctoral Candidate
University of South Florida, College of Education, CWY 408
PED 213
Tampa, FL 33647
(813)210-4363

Wanted

5-10 Business Managers to join a study by discussing the results of a survey conducted with area business managers last month to determine what international skills were needed by technical/occupational employees in the Tampa Bay area.

This is part of a doctoral dissertation for Ron Olney at
USF

Date, Time and Location will be at the group's discretion and will last 60 to 90 minutes.

If you are interested or would like more information, please contact Ron Olney at:

olney@jmslc.usf.edu
Cell Phone: 813-210-4363
Home Phone: 813-977-2453
Work Phone – 813-974-2615

Appendix 22

Solicitation for Focus Group – Business

Name and Address

Hello, I am Ron Olney, a doctoral candidate at the University of South Florida. I have been conducting my dissertation study on whether technical and occupational employees in the Tampa Bay area need to have some specific skills to better compete in the global economy. I have collected data from volunteers in almost 2000 companies and have analyzed the data for insights and trends that may be of interest to you and your business.

I am convening a small focus group of businessmen from around the eight county area to hear my findings and to help me to understand what the findings mean to the business community. I would like you to be part of this focus group.

The meeting will be held at _____ on _____ and will last about 1 hour. There are no costs, fees or monetary incentives associated with this meeting.

As with all research at USF, I am required to get your written authorization to participate in a research project, so we will be going over the Informed Consent Form at the beginning of our meeting (enclosed).

Please let me know by _____ if I can count on your attendance. I look forward to gaining insights from you and your fellow business leaders in the region. . It should be fun. If you have any questions, do not hesitate to call or email.

Sincerely,

Ron Olney, MPA, MA
Doctoral Candidate
Lieutenant Colonel, U.S. Army (Retired)
Work: (813) 974-2615
Cell (813) 210-4363
Email: olney@jmslc.usf.edu

Encl
Informed Consent Form

Wanted

5-10 Technical/Occupational Program Instructors or Administrators to join a study by discussing the results of a survey conducted with area business managers last month to determine what international skills were needed by technical/occupational employees in the Tampa Bay area.

This is part of a doctoral dissertation for Ron Olney at USF

Date, Time and Location will be at the group's discretion and will last 60 to 90 minutes.

If you are interested or would like more information, please contact Ron Olney at:

olney@jmslc.usf.edu
Cell Phone: 813-210-4363
Home Phone: 813-977-2453
Work Phone – 813-974-2615

Appendix 24

Solicitation for Focus Group- Academics

Name and Address

Hello, I am Ron Olney, a doctoral candidate at the University of South Florida. I have been conducting my dissertation study on whether technical and occupational employees in the Tampa Bay area need to have some specific skills to better compete in the global economy. I have collected data from volunteers in almost 2000 companies and have analyzed the data for insights and trends that may be of interest to you and your community college.

I am convening a small focus group of community college faculty and administrators from around the eight county area to hear my findings and to help me to understand what the findings mean to the technological and occupational programs in our academic community. I would like you to be part of this focus group.

The meeting will be held at _____ on _____ and will last about 1 hour. There are no costs, fees or monetary incentives associated with this meeting.

As with all research at USF, I am required to get your written authorization to participate in a research project, so we will be going over the Informed Consent Form at the beginning of our meeting (enclosed).

Please let me know by _____ if I can count on your attendance. I look forward to gaining insights from you and your fellow academicians in the region. It should be fun. If you have any questions, do not hesitate to call or email.

Sincerely,

Ron Olney, MPA, MA
Doctoral Candidate
Lieutenant Colonel, U.S. Army (Retired)
Work: (813) 974-2615
Cell (813) 210-4363
Email: olney@jmslc.usf.edu

Encl
Informed Consent Form

Appendix 25

Descriptives of Respondents

| Positions | n | Percent | Highest Education Attainments | n | Percent |
|-----------------------------|-----|---------|-------------------------------|-----|---------|
| Owner | 35 | 25.00 | Bachelors Degree | 45 | 32.14 |
| Manager | 34 | 24.10 | Masters Degree | 33 | 23.57 |
| President/COO/ GM/Dir | 21 | 14.90 | Associates Degree | 20 | 14.29 |
| Exec VP/ Asst VP | 10 | 7.09 | Some College | 18 | 12.90 |
| Director | 9 | 6.38 | High School | 12 | 8.57 |
| Administrator/ Principal | 7 | 4.96 | Terminal Degree | 10 | 7.14 |
| Partner | 7 | 4.95 | Post Doctorate | 2 | 1.43 |
| Asst Manager | 6 | 4.30 | | | |
| CEO/Chairman | 4 | 2.84 | | | |
| Foreman/ Leader | 4 | 2.84 | | | |
| Specialist | 2 | 1.42 | | | |
| Corp Compliance Officer | 1 | 0.71 | | | |
| Supervisor | 1 | 0.71 | | | |
| Total | 141 | 100 | | 140 | 100 |

Appendix 26

Chi-Squared Goodness of Fit for Study Business Types, Business Sizes and Business Sales

| TYPE | POPULATION TYPE | | | | RESPONDENTS TYPE | | SAMPLE TYPE | | Pop vs Resp | Pop vs Sam |
|------|-----------------|---------|----------|-------------|------------------|---------|-------------|---------|-------------------------|----------------------|
| | Frequency | Percent | Cum Freq | Cum Percent | Frequency | Percent | Frequency | Percent | | |
| 1 | 3072 | 4.76 | 3072 | 4.76 | 9 | 6.29 | 98 | 5.12 | 0.004917857 | 0.000272269 |
| 2 | 6790 | 10.52 | 9862 | 15.28 | 15 | 10.49 | 219 | 11.43 | 8.55513E-07 | 0.000787167 |
| 3 | 7817 | 12.12 | 17679 | 27.4 | 25 | 17.48 | 245 | 12.79 | 0.02370429 | 0.00037038 |
| 4 | 8191 | 12.7 | 25870 | 40.1 | 4 | 2.80 | 244 | 12.74 | 0.077173228 | 1.25984E-06 |
| 5 | 11977 | 18.56 | 37847 | 58.66 | 27 | 18.88 | 338 | 17.64 | 5.51724E-05 | 0.000456034 |
| 6 | 5023 | 7.79 | 42870 | 66.45 | 14 | 9.79 | 138 | 7.20 | 0.005134788 | 0.000446855 |
| 7 | 4845 | 7.51 | 47715 | 73.96 | 17 | 11.89 | 140 | 7.31 | 0.02554514 | 5.32623E-05 |
| 8 | 3839 | 5.95 | 51554 | 79.91 | 8 | 5.59 | 111 | 5.79 | 0.000217815 | 4.30252E-05 |
| 9 | 12965 | 20.09 | 64519 | 100 | 24 | 16.78 | 382 | 19.94 | 0.005453509 | 1.11996E-05 |
| | | | | | | | | | Chi-Square 20.8861** | Chi-Square 4.7948 |

| SIZE | POPULATION SIZE | | | | RESPONDENTS SIZE | | SAMPLE SIZE | | Pop vs Resp | Pop vs Sam |
|------|-----------------|---------|----------|-------------|------------------|---------|-------------|---------|-------------------------|------------------------|
| | Frequency | Percent | Cum Freq | Cum Percent | Frequency | Percent | Frequency | Percent | | |
| 1 | 35296 | 54.59 | 35296 | 54.59 | 58 | 40.56 | 1025 | 53.40 | 0.036058051 | 0.000259406 |
| 2 | 14869 | 23 | 50165 | 77.59 | 38 | 26.57 | 422 | 21.99 | 0.005244868 | 0.000524036 |
| 3 | 7032 | 10.88 | 57197 | 88.47 | 19 | 13.29 | 242 | 12.61 | 0.005338327 | 0.002750827 |
| 4 | 3837 | 5.93 | 61034 | 94.4 | 9 | 6.29 | 104 | 5.42 | 0.001849245 | 2.71698E-05 |
| 5 | 1549 | 2.4 | 62583 | 96.8 | 6 | 4.20 | 62 | 3.23 | 0.012695082 | 0.002557787 |
| 6 | 1240 | 1.92 | 63823 | 98.72 | 6 | 4.20 | 34 | 1.77 | 0.027075 | 0.000117188 |
| 7 | 602 | 0.93 | 64425 | 99.65 | 2 | 1.40 | 22 | 1.15 | 0.002375269 | 0.00052043 |
| 8 | 227 | 0.35 | 64652 | 100 | 5 | 3.50 | 7 | 0.36 | 0.2835 | 2.85714E-06 |
| | | | | | | | | | Chi-Square 52.3902** | Chi-Square 14.1882* |

Appendix 26 (Continues)

Chi-Squared Goodness of Fit for Study Business Types, Business Sizes and Business Sales

| SALES | POPULATION SALES | | | | RESPONDENTS SALES | | SAMPLE SALES | | Pop vs Resp | Pop vs Sam |
|-------|------------------|---------|----------|-------------|-------------------|---------|--------------|---------|--------------------------|-------------------------|
| | Frequency | Percent | Cum Freq | Cum Percent | Frequency | Percent | Frequency | Percent | | |
| 1 | 3054 | 5.38 | 3054 | 5.38 | 14 | 10.53 | 106 | 6.30 | 0.049233256 | 0.001560946 |
| 2 | 3742 | 6.59 | 6796 | 11.97 | 17 | 12.78 | 103 | 6.12 | 0.058186008 | 0.000337777 |
| 3 | 11979 | 21.11 | 18775 | 33.08 | 27 | 20.30 | 362 | 21.50 | 0.000309804 | 7.30895E-05 |
| 4 | 18955 | 33.4 | 37730 | 66.48 | 37 | 27.82 | 527 | 31.30 | 0.009321273 | 0.001315585 |
| 5 | 13967 | 24.61 | 51697 | 91.09 | 26 | 19.55 | 422 | 25.07 | 0.010406206 | 8.47892E-05 |
| 6 | 2327 | 4.1 | 54024 | 95.19 | 4 | 3.01 | 73 | 4.34 | 0.00291058 | 0.000136074 |
| 7 | 1752 | 3.09 | 55776 | 98.28 | 2 | 1.50 | 49 | 2.91 | 0.008142493 | 0.000104157 |
| 8 | 901 | 1.59 | 56677 | 99.87 | 2 | 1.50 | 35 | 2.08 | 4.67323E-05 | 0.001503906 |
| 9 | 56 | 0.1 | 56733 | 99.97 | 2 | 1.50 | 4 | 0.24 | 0.197065444 | 0.001893376 |
| 10 | 18 | 0.03 | 56751 | 100 | 2 | 1.50 | 3 | 0.18 | 0.724028813 | 0.00732108 |
| | | | | | | | | | Chi-Square 138.7978** | Chi-Square 24.1186** |

Appendix 27

Correlations of Business Size and Sales with International Skills

| International Skills | <u>M</u> | <u>SD</u> | Number of Employees | Total Sales \$ |
|---|----------|-----------|---------------------|----------------|
| Appreciation of cross-cultural differences | 2.20 | 1.25 | .219** | .111 |
| Foreign language skills | 2.17 | 1.17 | .202* | .201* |
| Understanding of local market/business practices | 1.77 | 1.27 | .293** | .228** |
| A global perspective | 1.59 | 0.95 | .179* | .005 |
| Understanding of international tech/occ standards | 1.49 | 0.97 | .150 | .274** |
| Country socio-economic/political knowledge | 1.45 | 0.84 | .171** | -.050 |
| International work experience | 1.27 | 0.61 | .036 | .071 |

* $p < .05$. ** $p < .01$

Appendix 28

Descriptives for Companies

| Business Category | n | Pct | Number of Employees | n | Pct | Total U.S. Dollar Sales (\$) | n | Pct |
|--|-----|-------|---------------------|-----|-------|------------------------------|-----|-------|
| Retail Firms | 27 | 18.88 | 10 or less | 58 | 40.85 | 250k or less | 14 | 10.37 |
| Health Care, Social Assistance Services | 25 | 17.48 | 11 – 20 | 38 | 26.76 | 250k – 500k | 17 | 12.59 |
| Other | 24 | 16.78 | 21-40 | 19 | 13.38 | 500k – 1M | 29 | 21.48 |
| Professional, Scientific, Technical Services | 17 | 11.89 | 40 – 80 | 9 | 6.34 | 1M – 2.5M | 37 | 27.41 |
| Accommodations/ Food Services | 15 | 10.49 | 81 – 120 | 5 | 3.52 | 2.5M – 10M | 26 | 19.29 |
| Construction | 14 | 9.79 | 121 – 215 | 6 | 4.23 | 10M – 20M | 4 | 2.96 |
| Manufacturing Firm | 9 | 6.29 | 216 – 500 | 2 | 1.41 | 20M – 50M | 2 | 1.48 |
| Wholesale Trade | 8 | 5.59 | Greater than 500 | 5 | 3.52 | 50M – 300M | 2 | 1.48 |
| Financial/ Insurance Services | 4 | 2.80 | | | | 300M – 1.5B | 2 | 1.48 |
| | | | | | | Greater than 1.5B | 2 | 1.48 |
| TOTAL | 143 | 100 | | 142 | 100 | | 135 | 100 |

Appendix 29

Percent of employee positions requiring International Skills

| Percentage of employees that work in positions requiring international knowledge or expertise (n = 141). | | |
|--|-----|------------|
| Percent | n | % of Total |
| 0% | 70 | 50.00 |
| 1% | 11 | 7.90 |
| 2% | 4 | 2.86 |
| 4% | 1 | 0.71 |
| 5% | 10 | 7.14 |
| 10% | 8 | 6.43 |
| 14% | 1 | 0.71 |
| 15% | 5 | 3.57 |
| 20% | 7 | 5.00 |
| 25% | 3 | 2.14 |
| 30% | 2 | 1.43 |
| 35% | 1 | 0.71 |
| 45% | 1 | 0.71 |
| 50% | 6 | 4.29 |
| 67% | 1 | 0.71 |
| 70% | 1 | 0.71 |
| 80% | 1 | 0.71 |
| 90% | 1 | 0.71 |
| 95% | 1 | 0.71 |
| 100% | 6 | 4.29 |
| TOTAL | 140 | 100 |

Appendix 30

Importance of Regions to International Activities: Mean Scores

| REGION | NOW | | | FUTURE (next 10 years) | | |
|---------------|-----|----------|-----------|---------------------------|----------|-----------|
| | n | <i>M</i> | <i>SD</i> | n | <i>M</i> | <i>SD</i> |
| Latin America | 143 | 1.87 | 1.15 | 143 | 2.08 | 1.30 |
| Europe | 143 | 1.57 | 0.97 | 143 | 1.73 | 1.09 |
| Asia | 143 | 1.37 | 0.89 | 141 | 1.45 | 0.99 |
| Middle East | 142 | 1.17 | 0.54 | 142 | 1.27 | 0.70 |
| Africa | 141 | 1.14 | 0.57 | 141 | 1.25 | 0.72 |

Note: Responses provided on 5-point response scale (1 = Not at all important to 5 = Critically important).

Appendix 31

Future Growth of International Activities

| Estimated International Business Growth as a Percent of Total Business Growth within 10 years (n = 142) | | |
|---|-----|-------|
| STATEMENT | n | Pct |
| No business will be derived internationally | 66 | 46.48 |
| A minimum percentage of business will be derived internationally | 54 | 38.03 |
| A significant percentage of business will be derived internationally | 18 | 12.68 |
| A critically large percentage of business will be derived internationally | 4 | 2.82 |
| TOTAL | 142 | 100 |

Appendix 32

Businesses employing Technical/ Occupational Sub-baccalaureate Employees by Career Fields and type of Education (n = 143)

| Career Fields of Employees | Businesses employing technical/occupational career fields with post high school but sub-baccalaureate education | community college coursework (without an earned certificate or degree) | community college program certificate | Associate's degrees | Another sub-baccalaureate degree | Total cells checked |
|--|---|--|---------------------------------------|---------------------|----------------------------------|---------------------|
| Business support | 71 | 17 | 25 | 44 | 10 | 95 |
| Business management | 74 | 13 | 21 | 52 | 6 | 92 |
| Health sciences | 30 | 13 | 15 | 18 | 6 | 52 |
| Trade and industry | 37 | 12 | 12 | 19 | 5 | 48 |
| Public, legal, and social services | 19 | 9 | 10 | 8 | 9 | 36 |
| Marketing | 35 | 12 | 6 | 11 | 6 | 35 |
| Computer and information sciences | 27 | 8 | 14 | 9 | 2 | 34 |
| Education | 22 | 13 | 7 | 4 | 5 | 29 |
| Engineering, architectural, and science technologies | 19 | 5 | 8 | 10 | 4 | 27 |
| Personal services | 17 | 6 | 5 | 7 | 1 | 19 |
| Agricultural and natural resources | 12 | 8 | 2 | 3 | 0 | 13 |
| Communications and design | 12 | 4 | 3 | 2 | 3 | 12 |
| Other | 7 | 5 | 3 | 2 | 2 | 12 |
| Protective services | 11 | 3 | 3 | 3 | 2 | 11 |
| Totals | 393 | 128 | 134 | 192 | 61 | 515 |
| Companies that checked | 121 | 66 | 65 | 80 | 32 | |

Appendix 33

International Business Management

Where (US or Foreign Offices) and how (US or Foreign nationals) companies currently filled technical and occupational positions in their international business operations (n = 143)

| | <u>In US Offices</u> | <u>In Foreign Offices</u> |
|--|----------------------|---------------------------|
| No international business operations | 111 | |
| No foreign offices; all International operations are handled from the U.S. | 26 | |
| Almost exclusively with U.S. nationals | 6 | 1 |
| Mostly with U.S. nationals, but with some foreign nationals | 3 | 0 |
| Mix of U.S. and foreign nationals | 2 | 0 |
| Mostly with foreign nationals, but with some U.S. nationals | 1 | 0 |
| Almost exclusively with foreign nationals | 1 | 2 |

Appendix 34

Shortages of International Skills

Positive responses to: Is it difficult for you to find U.S. nationals with the international knowledge, expertise and/or language skills needed for your firm (n = 30)?

| Identified knowledge, expertise and skills that are difficult to find | | |
|---|------|---------|
| | Nos. | Percent |
| Able to be understood in a language other than English | 20 | 22.22 |
| Comfort with working in international/multicultural groups | 17 | 18.89 |
| Knowledge of technical terms used in other languages | 15 | 16.67 |
| Knowledge of technical terms used in other languages | 15 | 16.67 |
| Skills that meet international technical standards | 10 | 11.11 |
| International travel experience beyond a vacation | 7 | 7.78 |
| International work experience | 7 | 7.78 |
| Other | 0 | 0.00 |
| TOTAL | 90 | 100 |

Appendix 35

Training Programs and Providers

Positive responses to: Has your firm engaged in programs designed to promote international skills? (n = 140)

Types of Programs by Training Providers

| Type of Program | In-House Provider | Community College Provider | University Provider | Consulting Firm Provider | Non-Profit/Government Provider | Total cell checks | Total companies |
|--|-------------------|----------------------------|---------------------|--------------------------|--------------------------------|-------------------|-----------------|
| Multicultural Staff Management | 20 | 2 | 1 | 8 | 1 | 32 | 24 |
| Foreign Language Training | 4 | 4 | 0 | 2 | 0 | 10 | 9 |
| International Technical Standards | 7 | 0 | 1 | 2 | 3 | 13 | 8 |
| Regional or Global Business Practices | 5 | 0 | 1 | 2 | 1 | 9 | 8 |
| International Cross-Cultural Seminars | 5 | 0 | 0 | 1 | 0 | 6 | 5 |
| Regional or Global Updates | 1 | 0 | 0 | 0 | 4 | 5 | 5 |
| Pre-Departure training before foreign assignment | 3 | 0 | 0 | 0 | 0 | 3 | 3 |
| Cross-National Functional Teams | 2 | 0 | 0 | 0 | 1 | 3 | 3 |
| Total | 47 | 6 | 3 | 15 | 10 | 81 | |

Appendix 36

Shortages of International Skills

Responses to: Why training programs have not met international business needs
(N = 18)

| Response | Nos. | Pct |
|---|------|-------|
| Not focused on my business needs | 7 | 38.89 |
| Too difficult to coordinate classes and assignments | 4 | 22.22 |
| Too expensive | 4 | 22.22 |
| Not current to international business environment (dated information) | 2 | 11.11 |
| Other | 1 | 11.11 |
| TOTAL | 18 | 100 |

Appendix 37

Community College Shortcomings

| Explanations why firms have not used Community Colleges as a resource to assist in the development of international competencies (n = 126) | | |
|--|---------------------|------------|
| Explanations | Number of Responses | Pct |
| My needs are being met or exceeded elsewhere | 85 | 52.80 |
| I am not aware of what the community college can offer | 56 | 34.78 |
| The community college has not met with me about my needs | 10 | 6.21 |
| The Community College won't/doesn't offer what my firm needs | 5 | 3.11 |
| The Community College programs are too difficult to set up | 2 | 1.24 |
| The class schedules are not flexible enough to meet my needs | 2 | 1.24 |
| Other (I have no need for international competencies) | 1 | 0.62 |
| The Community College programs are too expensive | 0 | 0 |
| TOTAL | 161 | 100 |

Appendix 38

Number and Size of Companies in Study and in Kedia/Daniel Study

CURRENT STUDY

| Industry | Company Size measured as number of employees | | | | | | | | Total |
|-------------------------------------|--|----------|----------|----------|-----------|------------|------------|---------------|-------|
| | 10 or Less | 11 to 20 | 21 to 40 | 41 to 80 | 81 to 120 | 121 to 215 | 216 to 500 | More than 500 | |
| Retail Firm | 12 | 9 | 2 | 1 | 1 | 2 | 0 | 0 | 27 |
| Health Care, Social Assistance | 5 | 7 | 4 | 2 | 4 | 1 | 0 | 2 | 25 |
| Other | 9 | 7 | 3 | 3 | 0 | 2 | 0 | 0 | 24 |
| Professional, Scientific, Technical | 8 | 5 | 2 | 1 | 0 | 0 | 0 | 1 | 17 |
| Accommodations/ Food Service | 4 | 5 | 4 | 1 | 0 | 0 | 0 | 1 | 15 |
| Construction | 9 | 3 | 1 | 0 | 0 | 0 | 1 | 0 | 14 |
| Manufacturing Firm | 5 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 9 |
| Wholesale Trade | 5 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 8 |
| Financial/Insurance | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 4 |
| Total | 58 | 38 | 19 | 9 | 6 | 6 | 2 | 5 | 143 |

KEDIA/DANIEL STUDY

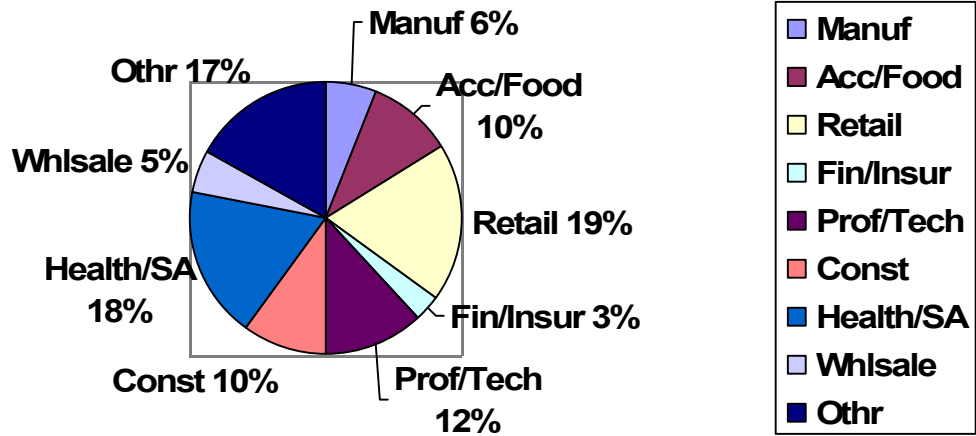
| Industry | Company Size measured as number of employees | | | | Total |
|---|--|--------------|-----------------|------------------|-------|
| | Less than 500 | 501 to 5,000 | 5,000 to 20,000 | More than 20,000 | |
| Manufacturing Firm | 24 | 14 | 2 | 7 | 47 |
| Service Firm | 20 | 3 | 2 | 3 | 28 |
| Other | 15 | 4 | 0 | 3 | 22 |
| Financial Service Firm | 3 | 1 | 1 | 2 | 7 |
| Telecommunications and/or Internet Firm | 3 | 1 | 0 | 0 | 4 |
| Retail Firm | 1 | 2 | 0 | 0 | 3 |
| Total | 66 | 25 | 5 | 15 | 111 |

Kedia & Daniel, 2003, p. 7.

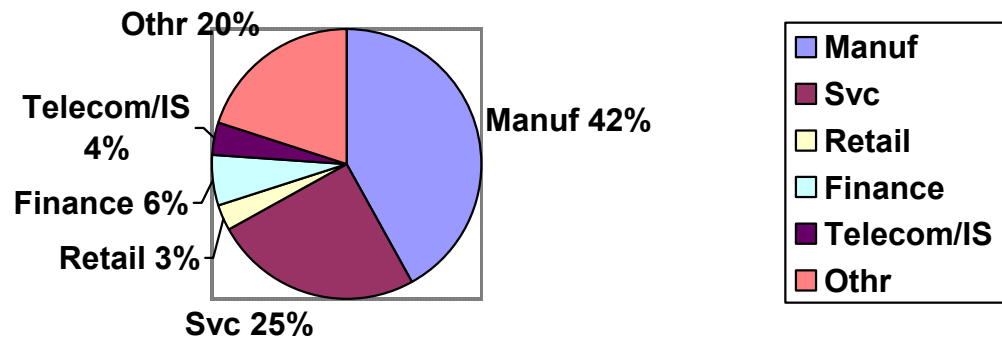
Appendix 39

Firms by Industry Percentage in Study and Kedia/Daniel Study

CURRENT STUDY



KEDIA/DANIEL STUDY

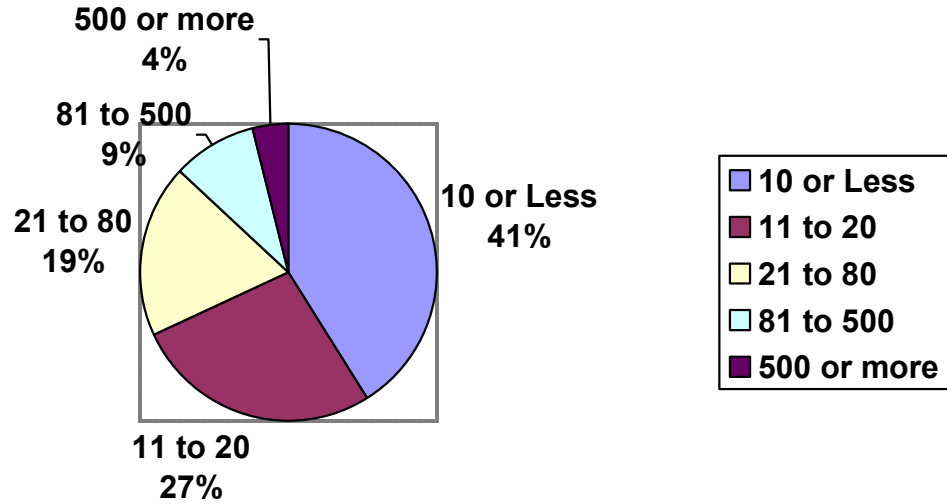


Kedia & Daniel, 2003, p. 7.

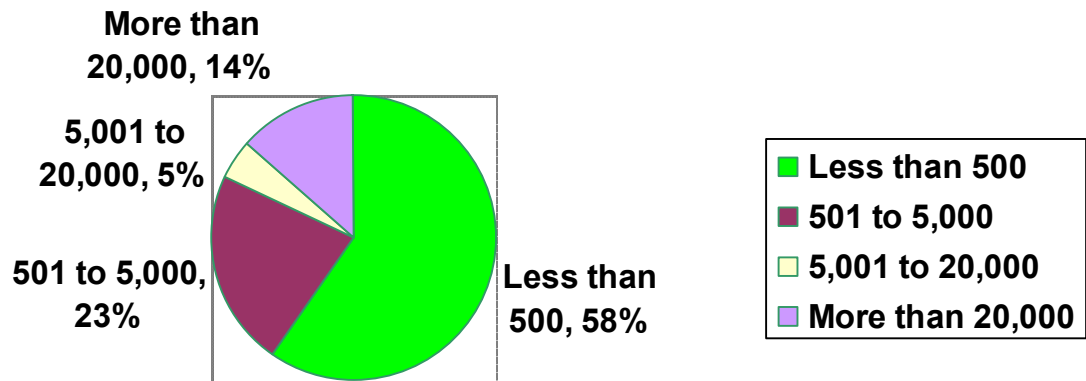
Appendix 40

Firms by Company Size Percentage: Current Study and Kedia/Daniel Study

CURRENT STUDY



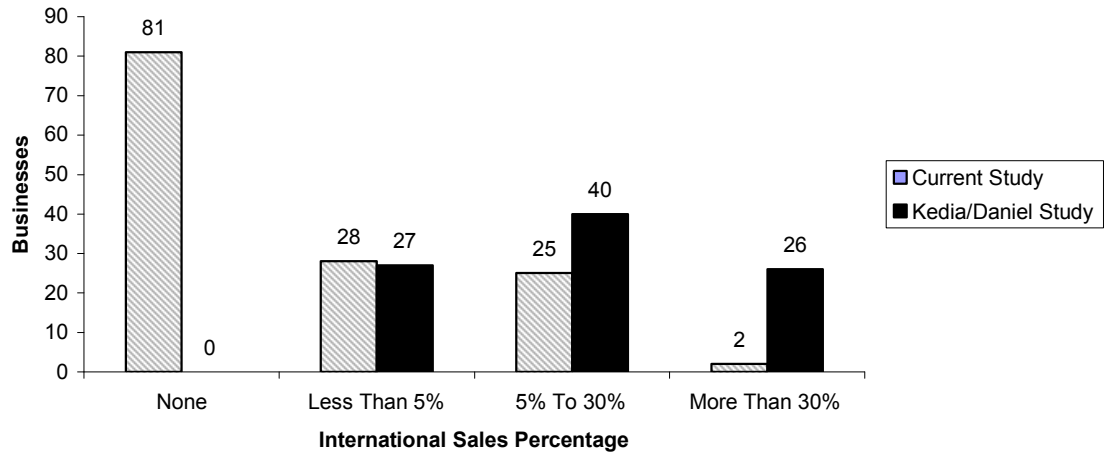
KEDIA/DANIEL STUDY



Kedia & Daniel, 2003, p. 8.

Appendix 41

International Sales as a Percentage of Total Sales: Current Study and Kedia/Daniel Study



Kedia & Daniel, 2003, p. 9.

Appendix 42

Current Staffing Practices for management positions in international business operations: Current Study and Kedia/Daniel Study

CURRENT STUDY – Technical and occupational positions only

| Staffing Practice Used | In U.S. Offices | In Foreign Offices |
|--|-----------------|--------------------|
| We have no international business operations | 71% | - |
| Almost exclusively with U.S. nationals | 4% | 1% |
| Mostly with U.S. Nationals, but with some foreign nationals | 2% | 0% |
| With a mix of U.S. and foreign nationals | 1% | 0% |
| Mostly with foreign nationals, but with some U.S. nationals | 1% | 0% |
| Almost exclusively with foreign nationals | 1% | 1% |
| We have no foreign offices; international operations are handled from the U.S. | 17% | - |

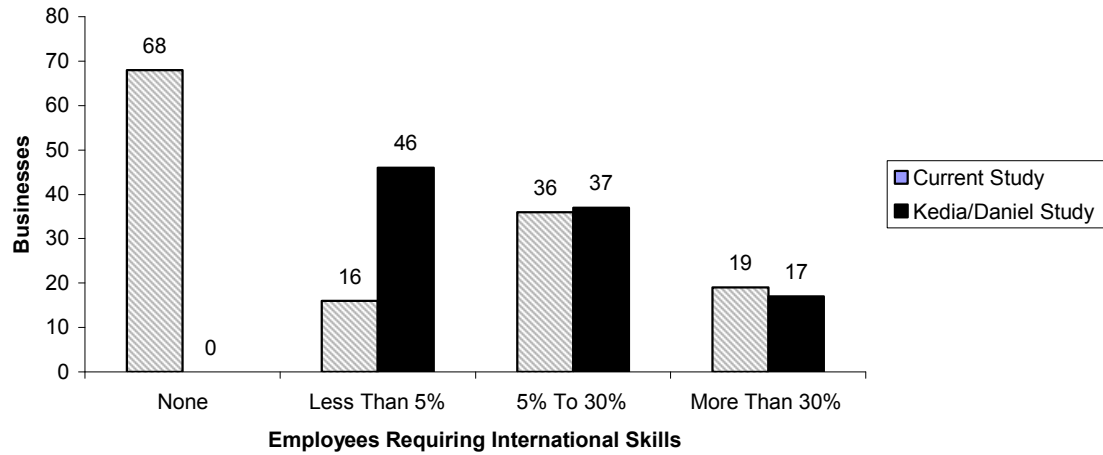
KEDIA/DANIEL STUDY – All management positions

| Staffing Practice Used | In U.S. Offices | In Foreign Offices |
|--|-----------------|--------------------|
| We have no international business operations | 0% | - |
| Almost exclusively with U.S. nationals | 59% | 2% |
| Mostly with U.S. Nationals, but with some foreign nationals | 23% | 4% |
| With a mix of U.S. and foreign nationals | 12% | 8% |
| Mostly with foreign nationals, but with some U.S. nationals | 2% | 16% |
| Almost exclusively with foreign nationals | 1% | 21% |
| We have no foreign offices; international operations are handled from the U.S. | 49% | - |

Kedia & Daniel, 2003, p. 16

Appendix 43

Percentage of Employees working in Positions Requiring International Knowledge or Expertise: Current Study and Kedia/Daniel Study

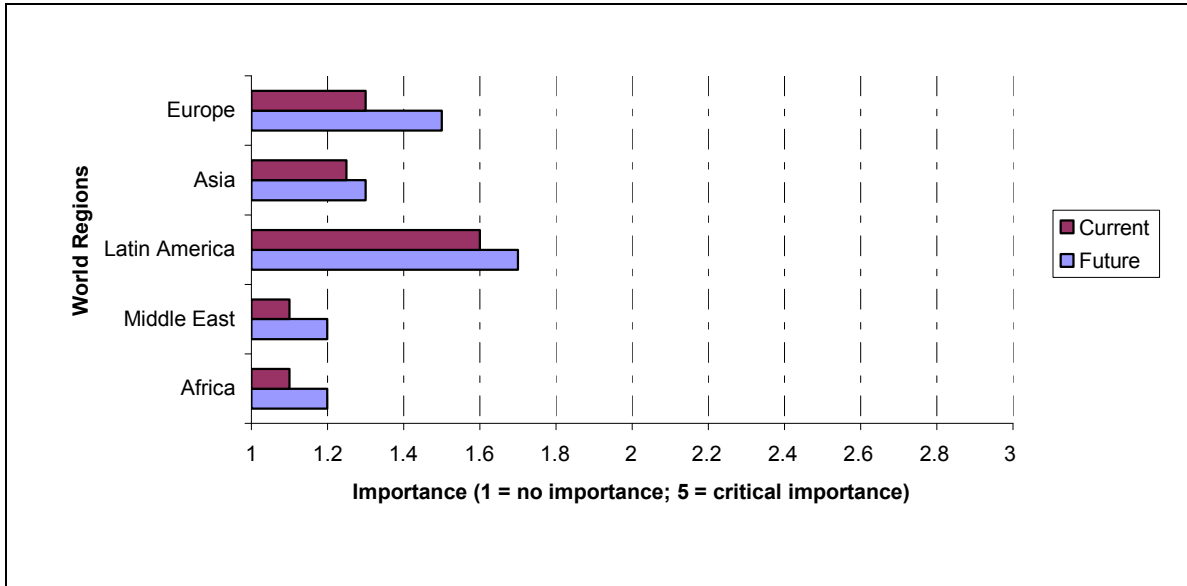


Kedia & Daniel, 2003, p. 9.

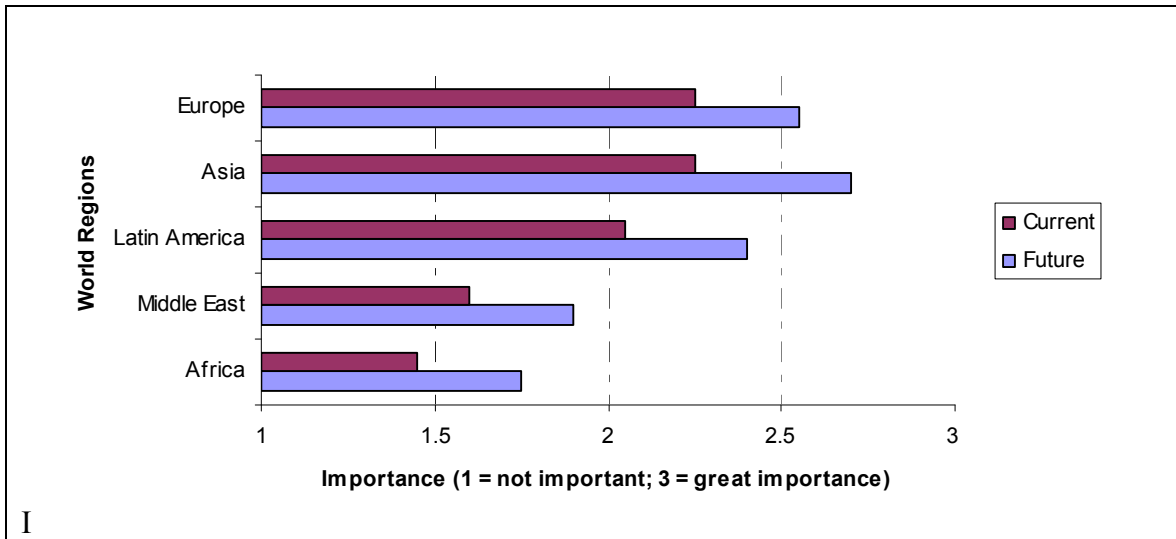
Appendix 44

Current and Future Importance of Regions: Current Study and Kedia/Daniel Study

CURRENT STUDY



KEDIA/DANIEL STUDY



I

Kedia & Daniel, 2003, p. 11.

Appendix 45

Importance of World Regions to Respondents' International Activities: Current Study and Kedia/Daniel Study

CURRENT STUDY

| World Region | Importance Now | | | Importance in the Future | | |
|---------------|----------------|------|-------|--------------------------|------|-------|
| | None | Some | Great | None | Some | Great |
| Latin America | 55% | 33% | 12% | 50% | 28% | 21% |
| Europe | 68% | 26% | 6% | 61% | 26% | 12% |
| Asia | 80% | 13% | 6% | 76% | 14% | 9% |
| Middle East | 88% | 11% | 1% | 81% | 16% | 3% |
| Africa | 91% | 8% | 1% | 85% | 12% | 3% |

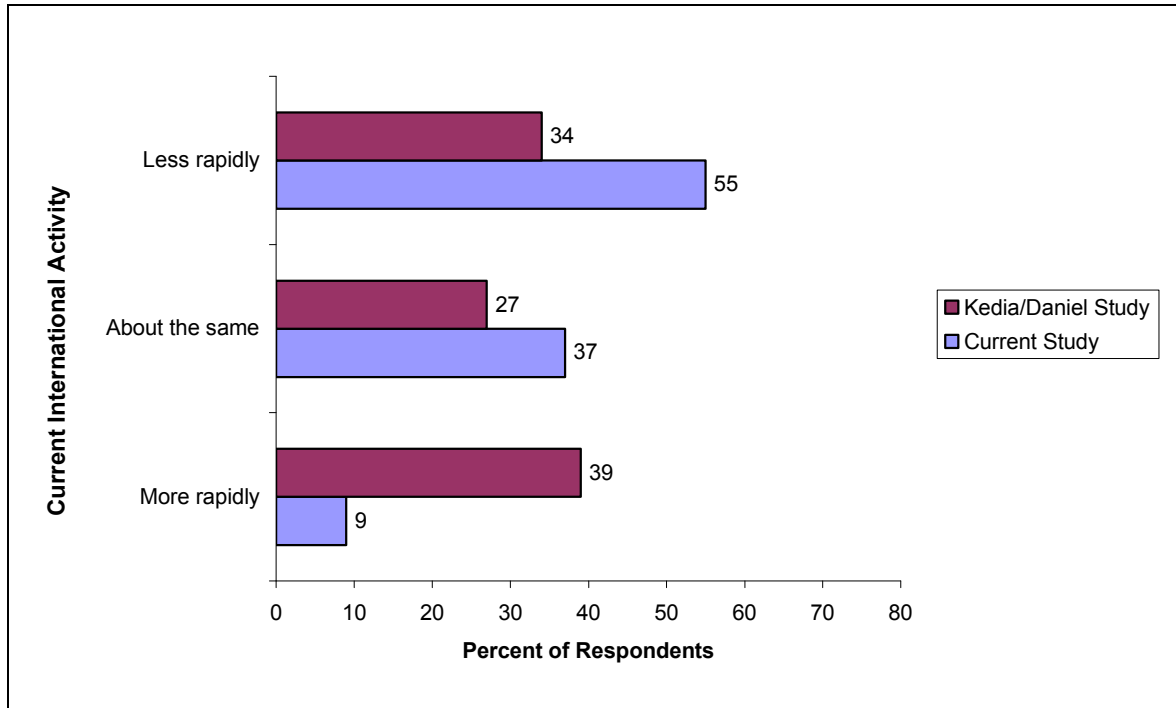
KEDIA/DANIEL STUDY

| World Region | Importance Now (%) | | | Importance in the Future (%) | | |
|---------------|--------------------|------|-------|------------------------------|------|-------|
| | None | Some | Great | None | Some | Great |
| Asia | 16% | 29% | 55% | 4% | 20% | 76% |
| Europe | 17% | 38% | 45% | 8% | 31% | 62% |
| Latin America | 28% | 40% | 31% | 15% | 31% | 54% |
| Middle East | 56% | 27% | 17% | 37% | 36% | 27% |
| Africa | 66% | 25% | 9% | 42% | 35% | 23% |

Kedia & Daniel, 2003, p.11.

Appendix 46

Current Growth of International Activities compared to Domestic Activities:
Current Study and Kedia/Daniel Study

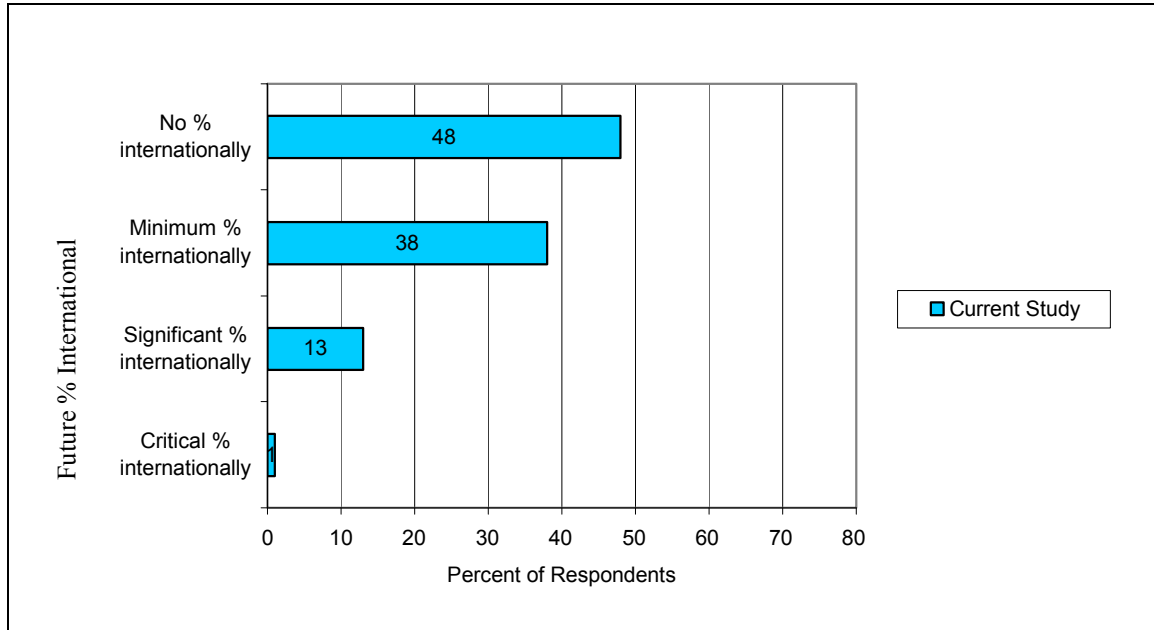


Kedia & Daniel, 2003, p. 12

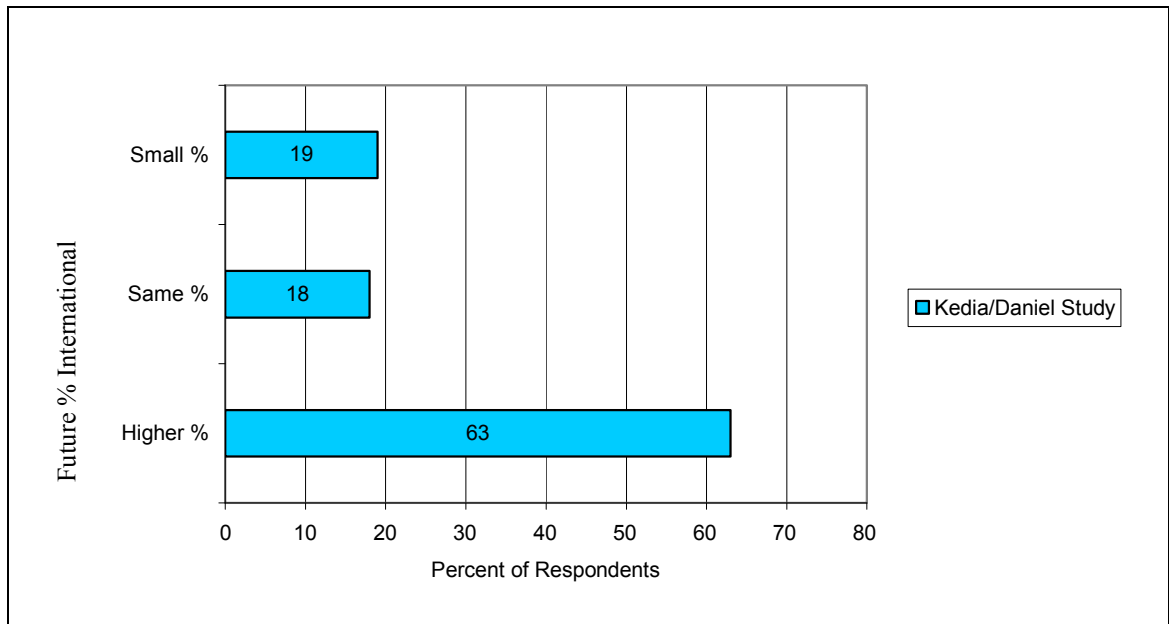
Appendix 47

Percent of total sales revenue from international business within the next 10 years:
Current Study and Kedia/Daniel Study

CURRENT STUDY



KEDIA/DANIEL STUDY

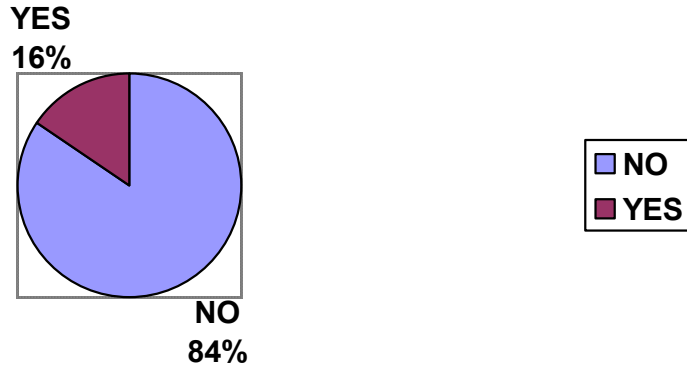


Kedia & Daniel, 2003, p. 13.

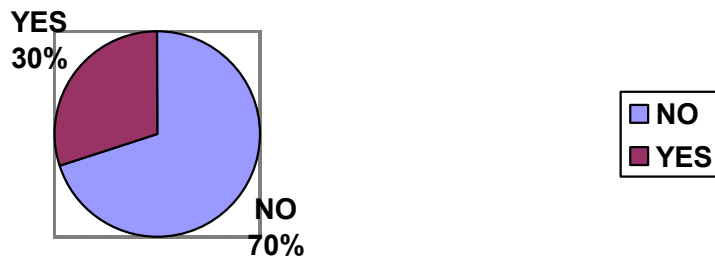
Appendix 48

International business opportunities: Current Study and Kedia/Daniel Study

CURRENT STUDY – Did your business fail to fully exploit international business opportunities due to insufficient internationally competent personnel in the past five years: Technical or occupational personnel only.



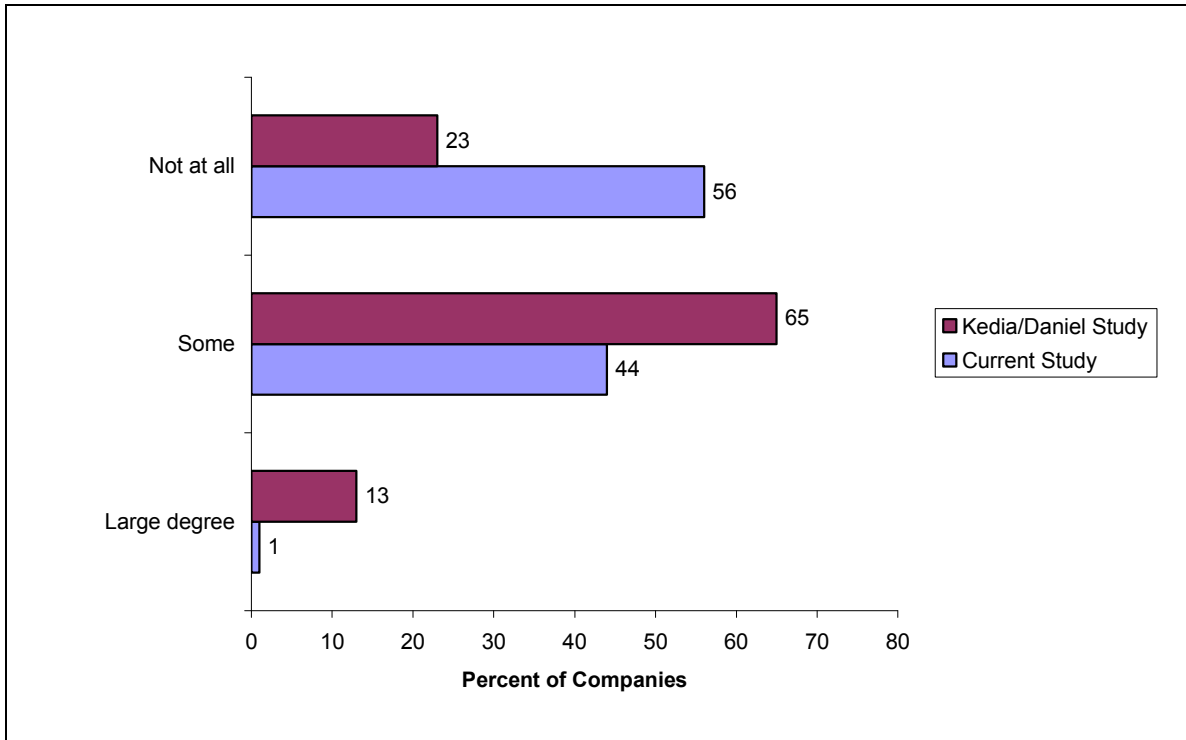
KEDIA/DANIEL STUDY – Did your business fail to fully exploit international business opportunities due to insufficient internationally competent personnel in the past five years.



Kedia & Daniel, 2003, p. 14.

Appendix 49

Overall business increase if more international expertise were available:
Current Study and Kedia/Daniel Study

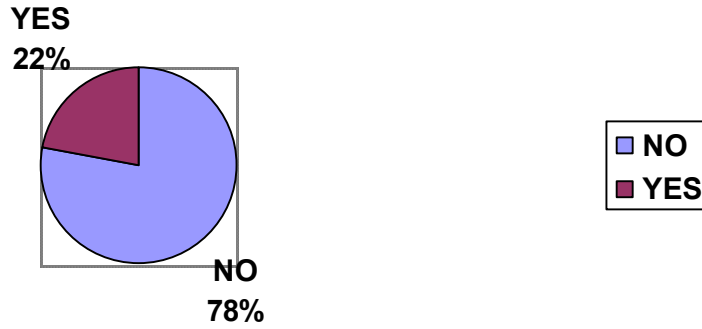


Kedia & Daniel, 2003, p. 12

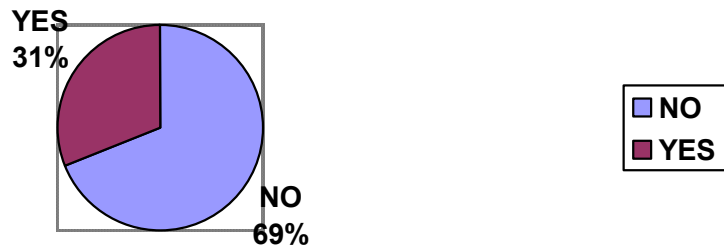
Appendix 50

Difficulty in locating internationally skilled employees:
Current Study and Kedia/Daniel Study

CURRENT STUDY .Is it difficult to find U.S. national with international knowledge, expertise and/or language skills needed?



KEDIA/DANIEL STUDY – Is it difficult to find U.S. national with international knowledge, expertise and/or language skills needed?

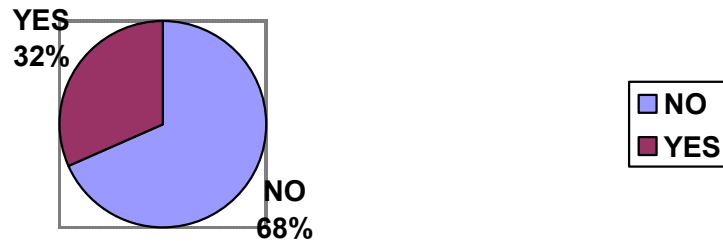


Kedia & Daniel, 2003, p. 22.

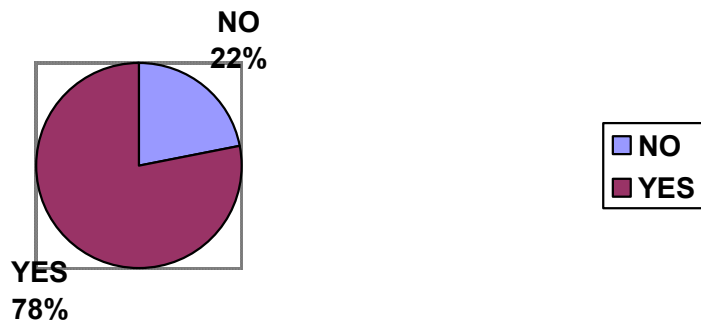
Appendix 51

International emphasis in the next 10 years:
Current Study and Kedia/Daniel Study

CURRENT STUDY .Over the next 10 years will your company place a greater emphasis on international skills among technical/occupational managers and employees?



KEDIA/DANIEL STUDY Over the next 10 years will your company place a greater emphasis on international skills among management and employees?

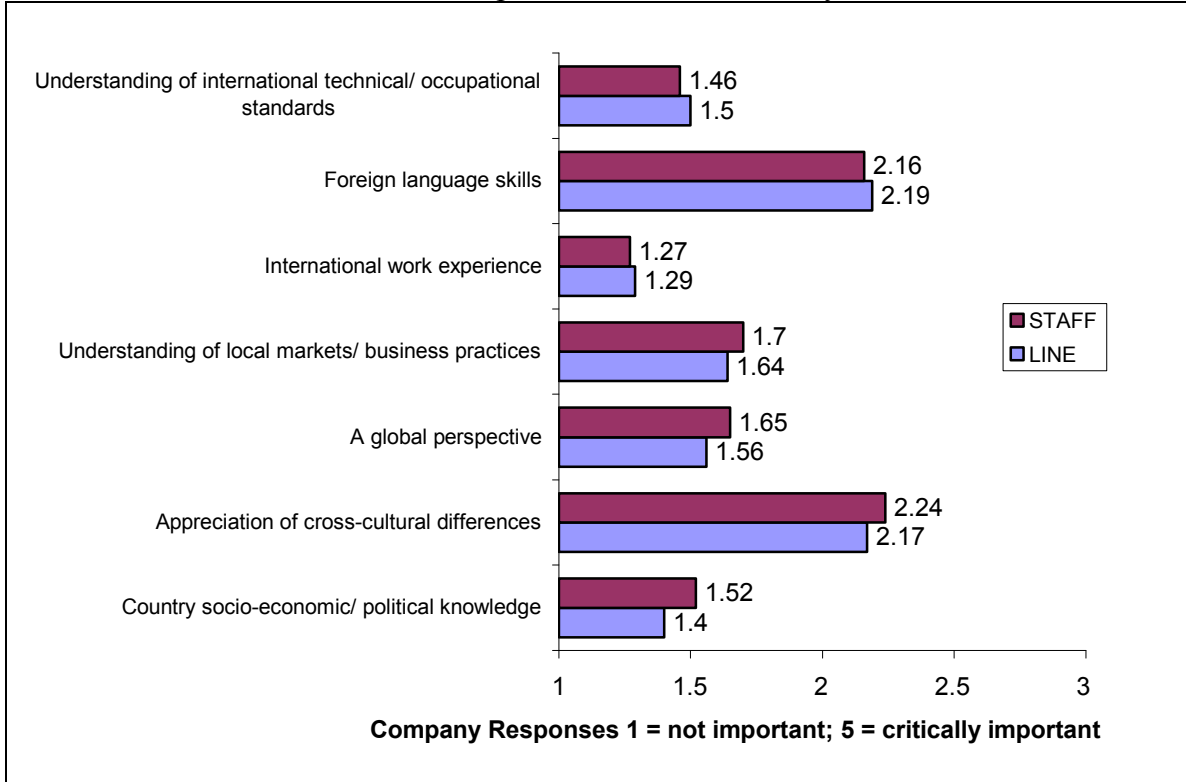


Kedia & Daniel, 2003, p. 23.

Appendix 52

Importance of international skills for professional line staff and line management: Current Study

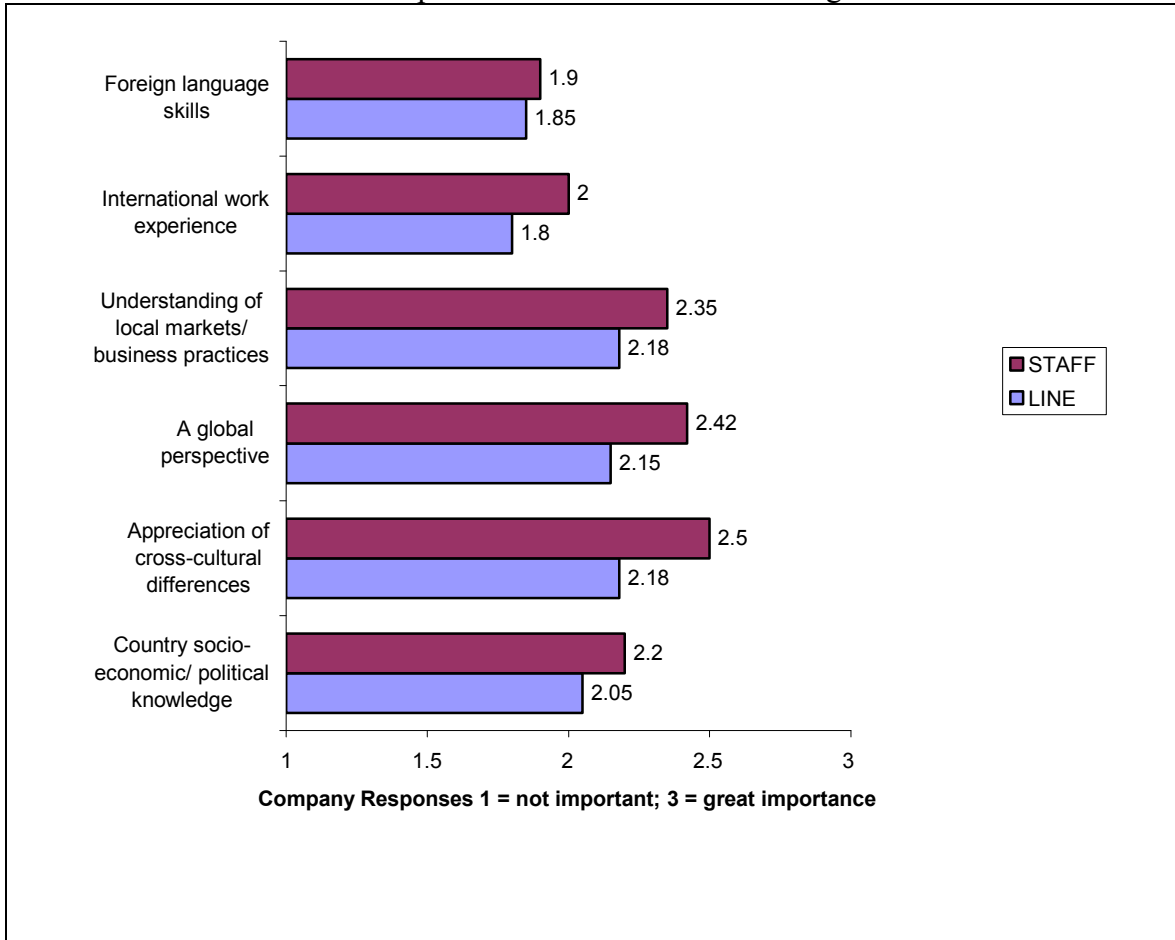
CURRENT STUDY: Technical/occupational line and staff only



Appendix 53

Importance of international skills for professional line staff and line management: Kedia/Daniel Study

KEDIA/DANIEL STUDY: All professional staff and line management



Kedia & Daniel, 2003, p.18.

Appendix 54

Importance of international skills expertise for staff and line employees by Percentages:
Current study and Kedia/Daniel Study

CURRENT STUDY: Technical/Occupational Staff and Line Personnel only.

| International Skills | Importance for Tech/Occ Staff | | | Importance for Tech/Occ Line | | |
|---|-------------------------------|------|-------|------------------------------|------|-------|
| | None | Some | Great | None | Some | Great |
| Appreciation of cross-cultural differences | 39% | 42% | 19% | 42% | 37% | 21% |
| Foreign language skills | 41% | 44% | 16% | 39% | 44% | 16% |
| A global perspective | 66% | 26% | 9% | 66% | 28% | 6% |
| Understanding of local market/business practices | 66% | 21% | 12% | 67% | 24% | 9% |
| Country socio-economic/political knowledge | 69% | 23% | 8% | 74% | 23% | 4% |
| Understanding of international tech/occ standards | 76% | 17% | 7% | 72% | 19% | 9% |
| International work experience | 81% | 18% | 1% | 79% | 19% | 1% |

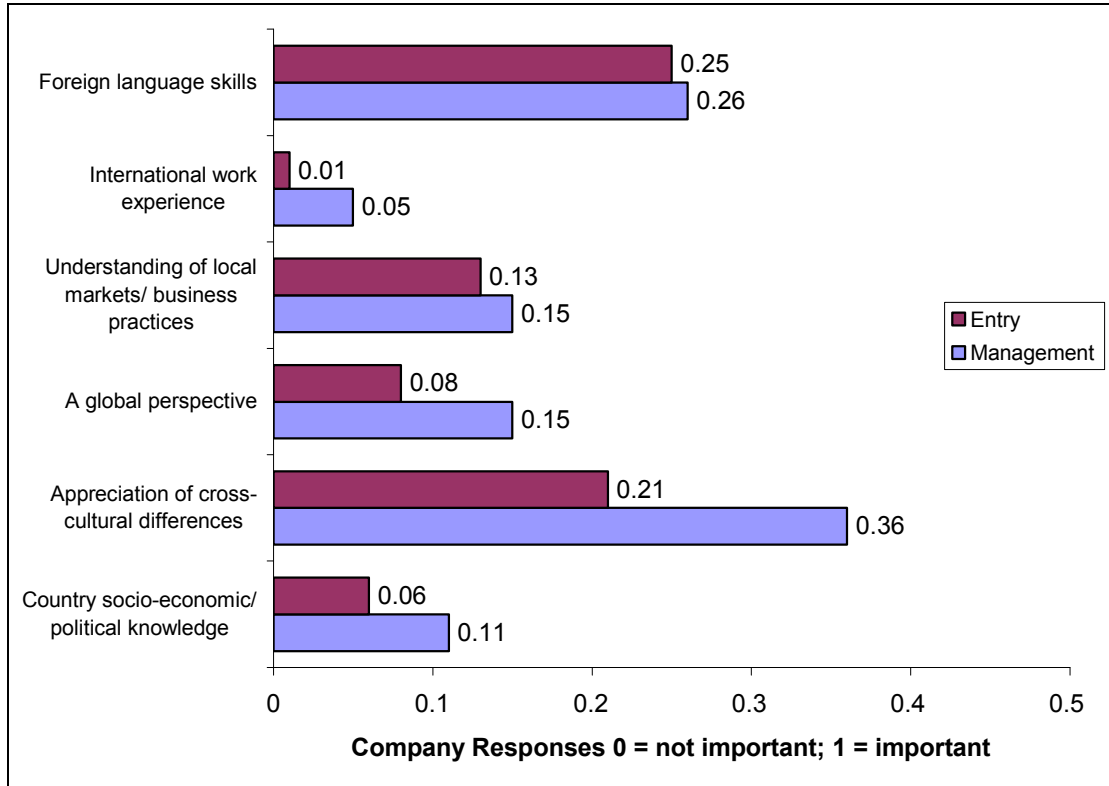
KEDIA/DANIEL STUDY: Professional Staff and Line Management.

| International Skills | Importance for Professional Staff | | | Importance for Line Management | | |
|--|-----------------------------------|------|-------|--------------------------------|------|-------|
| | None | Some | Great | None | Some | Great |
| Appreciation of cross-cultural differences | 7% | 35% | 58% | 16% | 38% | 46% |
| A global perspective | 9% | 36% | 56% | 22% | 43% | 34% |
| Understanding of local market/business practices | 9% | 42% | 49% | 21% | 42% | 37% |
| Country socio-economic/political knowledge | 13% | 52% | 36% | 22% | 50% | 28% |
| International work experience | 25% | 52% | 24% | 36% | 38% | 25% |
| Foreign language skills | 27% | 55% | 18% | 32% | 47% | 21% |
| Understanding of international standards | Not measured | | | Not measured | | |

Kedia & Daniel, 2003, p.19.

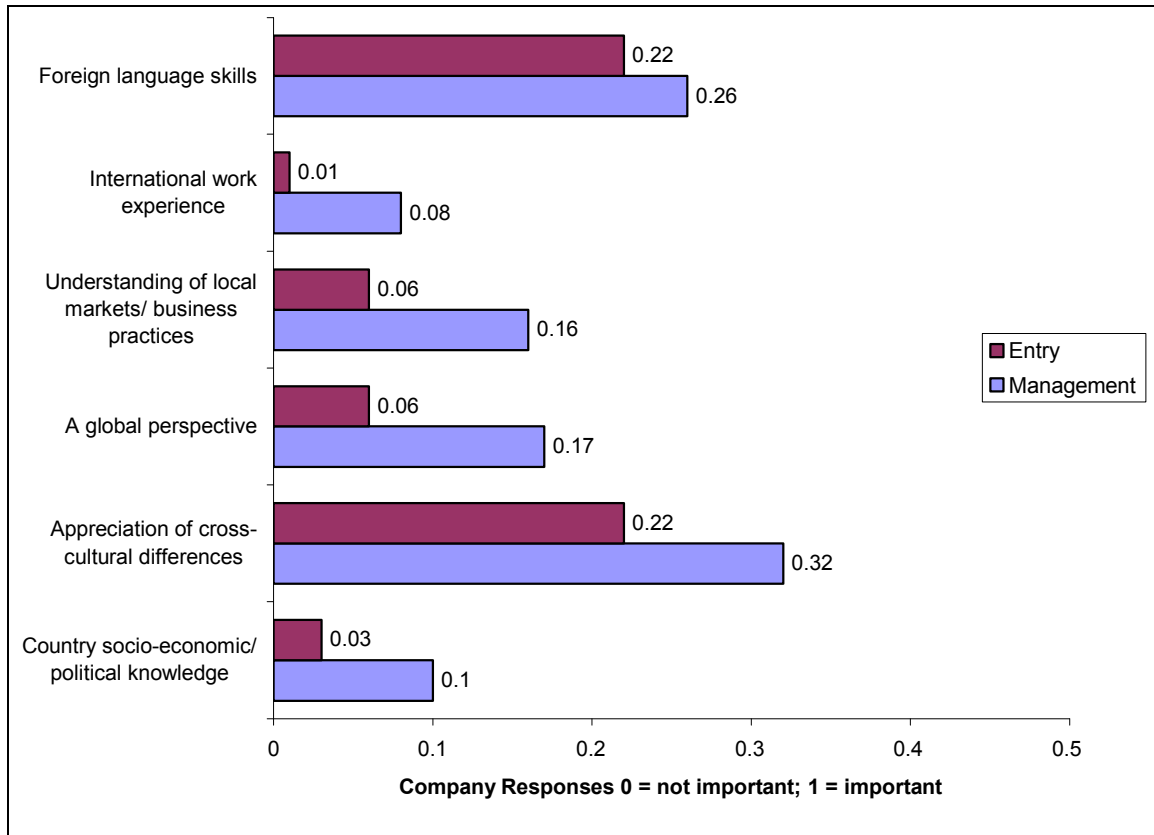
Appendix 55

Importance of international skills expertise for technical/occupational staff employees by Level: Current Study



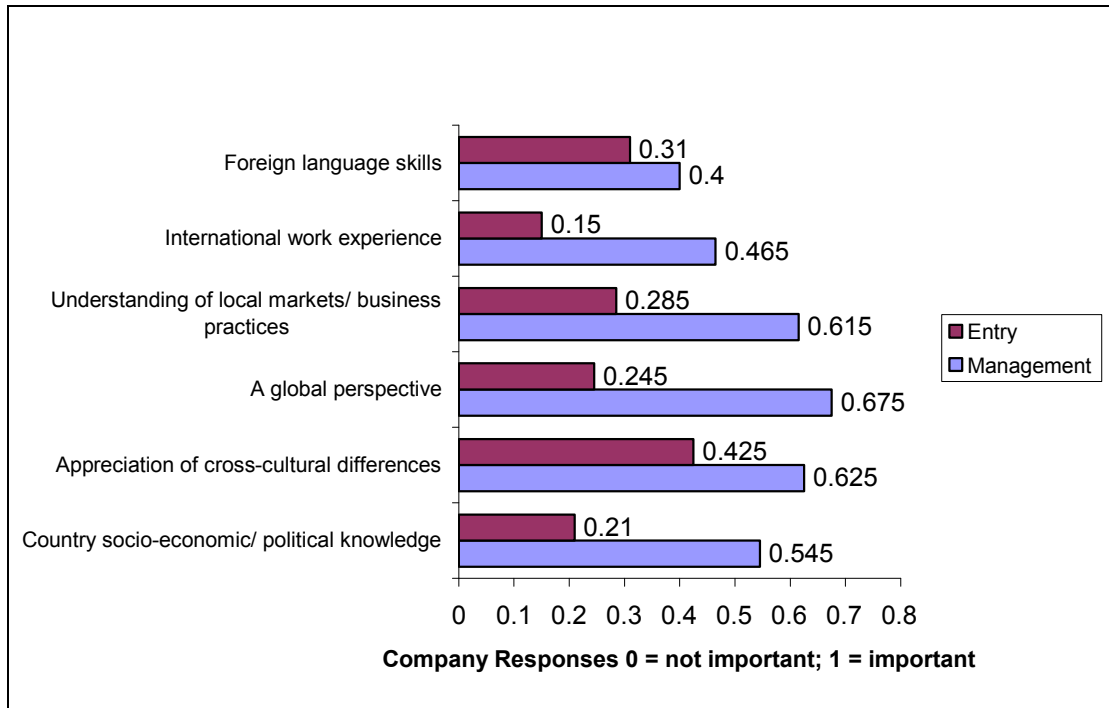
Appendix 56

Importance of international skills expertise for technical/occupational line employees by Level: Current Study



Appendix 57

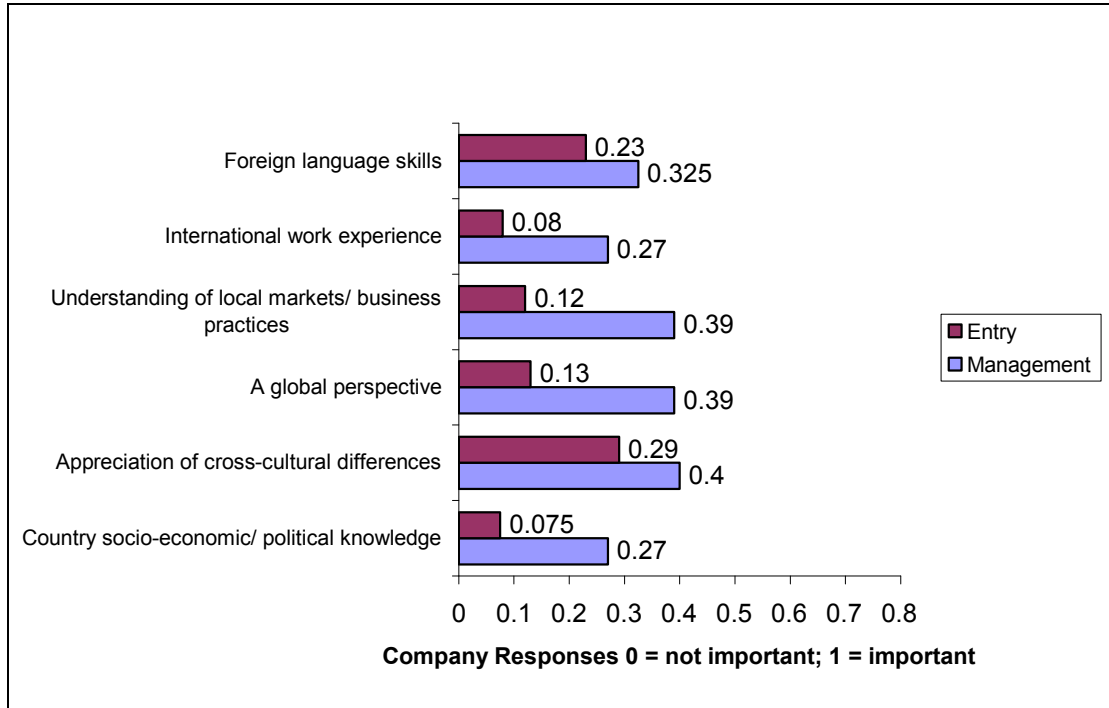
Importance of international skills expertise for professional staff by Level: Kedia/Daniel Study



Kedia & Daniel, 2003, p. 20.

Appendix 58

Importance of international skills expertise for line positions by Level: Kedia/Daniel Study

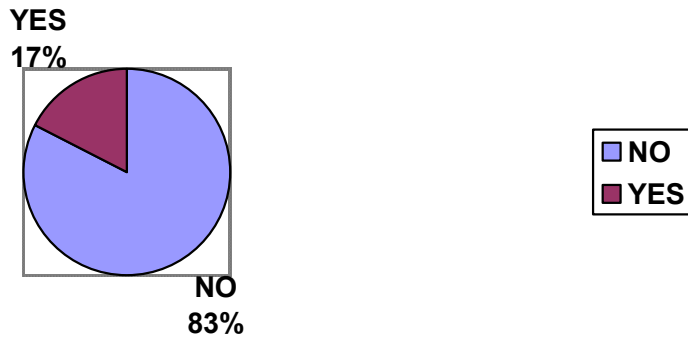


Kedia & Daniel, 2003, p. 21.

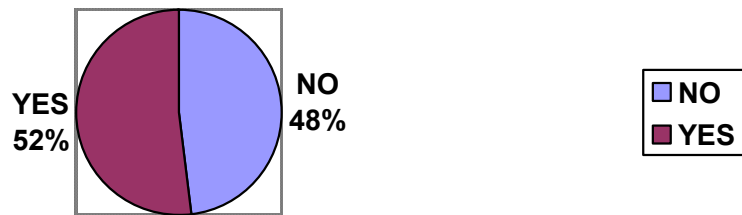
Appendix 59

Offerings of International skills programs:
Current Study and Kedia/Daniel Study

CURRENT STUDY: Has your firm engaged in programs designed to promote international skills?



KEDIA/DANIEL STUDY: Has your firm engaged in programs designed to promote international skills?



Kedia & Daniel, 2003, p. 24.

Appendix 60

International Training and Sources: Current study and Kedia/Daniel study

CURRENT STUDY

| Training Focus | Type of Provide | | | | |
|--|--------------------|-------------------|------------|------------|-------------------|
| | In – house program | Community college | University | Consultant | Non-profit /Govt. |
| International cross-cultural seminars | 18% | 0% | 0% | 1% | 0% |
| Pre-departure training for expatriates | 2% | 0% | 0% | 0% | 0% |
| Foreign language training | 3% | 3% | 0% | 1% | 0% |
| Regional or global updates | 4% | 0% | 1% | 1% | 1% |
| Multi-cultural staff management | 14% | 1% | 1% | 6% | 1% |
| Cross-national functional teams | 1% | 0% | 0% | 0% | 1% |
| International technical standards | 5% | 0% | 1% | 1% | 2% |

KEDIA/DANIEL STUDY

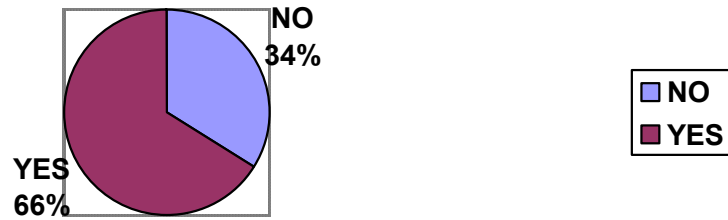
| Training Focus | Type of Provider | | | | |
|--|--------------------|-------------------|--------------|------------|-------------------|
| | In – house program | Community college | University | Consultant | Non-profit /Govt. |
| International cross-cultural seminars | 14% | Not measured | 11% | 11% | 11% |
| Pre-departure training for expatriates | 16% | Not measured | 1% | 10% | 3% |
| Foreign language training | 14% | Not measured | 10% | 16% | 0% |
| Regional or global updates | 23% | Not measured | 10% | 12% | 17% |
| Multi-cultural staff management | 12% | Not measured | 4% | 5% | 2% |
| Cross-national functional teams | 15% | Not measured | 4% | 5% | 1% |
| International technical standards | | | Not measured | | |

Kedia & Daniel, 2003, p. 25.

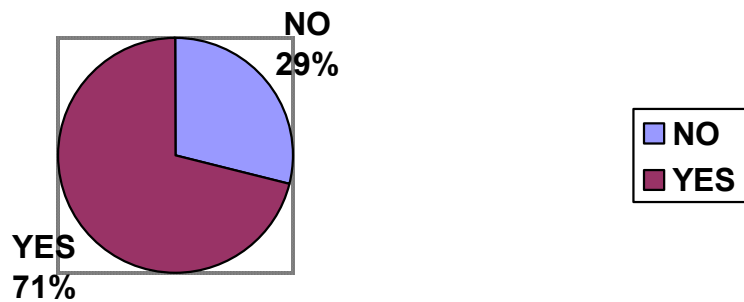
Appendix 61

International Training Program Satisfaction:
Current Study and Kedia/Daniel Study

CURRENT STUDY: Are your international training needs being met?



KEDIA/DANIEL STUDY: Have these programs met your international business needs?

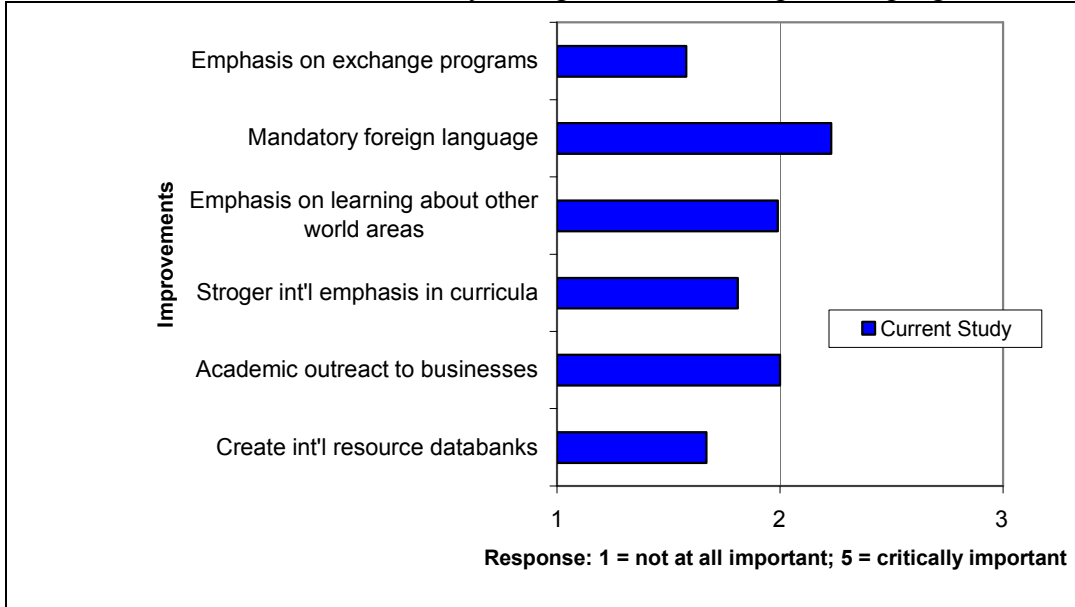


Kedia & Daniel, 2003, p. 26.

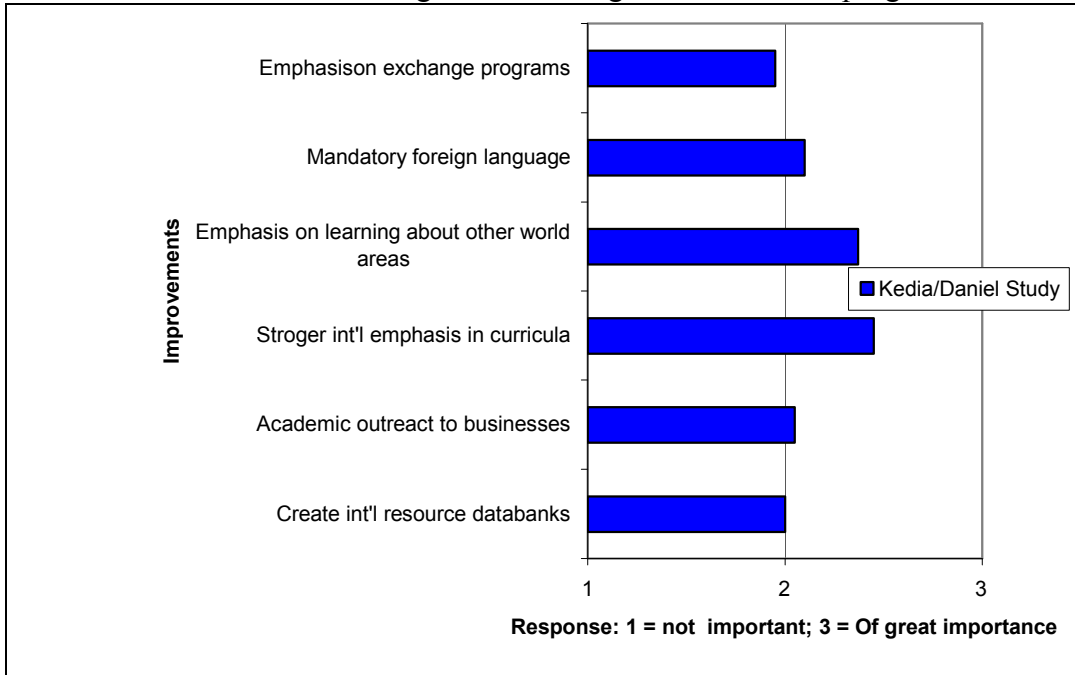
Appendix 62

Importance of Improved International Business Education: Current Study and Kedia/Daniel Study

CURRENT STUDY: For community college technical/occupational programs



KEDIA/DANIEL STUDY: For graduate/undergraduate business programs



Kedia & Daniel, 2003, p. 27.

Appendix 63

Improvements for international education: Current study and Kedia/Daniel study

CURRENT STUDY: For Community college technical/occupational programs.

| Suggested International Education Improvements | Importance of Improvement | | |
|--|---------------------------|------|-------|
| | None | Some | Great |
| Improved academic outreach for business | 39% | 43% | 18% |
| Stronger int'l emphasis in curricula | 51% | 32% | 17% |
| Mandatory foreign language | 51% | 35% | 15% |
| More emphasis on learning about other world areas | 59% | 29% | 12% |
| More emphasis on exchange programs | 63% | 30% | 7% |
| Creation of int'l resources databases/clearinghouses | 68% | 23% | 8% |

KEDIA/DANIEL STUDY: For graduate/undergraduate business programs.

| Suggested International Education Improvements | Importance of Improvement | | |
|--|---------------------------|------|-------|
| | None | Some | Great |
| Stronger int'l emphasis in curricula | 15% | 31% | 54% |
| More emphasis on learning about other world areas | 13% | 37% | 51% |
| Improved academic outreach for business | 24% | 44% | 33% |
| Mandatory foreign language | 24% | 49% | 28% |
| Creation of int'l resources databases/clearinghouses | 23% | 54% | 24% |
| More emphasis on exchange programs | 26% | 52% | 23% |

Kedia & Daniel, 2003, p.28.

About the Author

Ronald L. Olney received his Bachelor's Degree in General Engineering from the United States Military Academy, West Point, NY, in 1975. Mr. Olney's earned a Master's degree in Personnel Administration from Central Michigan University in 1982 and a Master's Degree in Adult Education from the University of South Florida in 2005.

During his 20 year military career, Mr. Olney worked in law enforcement, engineering and teaching positions world-wide and authored numerous courses in law enforcement, leadership and training management. Since 1995, he has worked as a cattle rancher, in policy enforcement, as an emergency services director, and as a researcher.

Mr. Olney intends to pursue multiple areas of inquiry pertaining to globalization, the rehabilitation of injured military veterans, leadership studies, joint military education and the management and conduct of public and private grants.

He and his bride, Dr. Christine M. Olney, reside in Tampa, Florida.