UNIVERSITY OF CINCINNATI

Date: December 14, 2004

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hereby submit this work as part of the requirements for the degree of:

Doctor of Education

in:

Curriculum & Instruction–Instructional Technology

It is entitled:

A Cross-Cultural Study of Two Teacher Education Technology Classes: United States and the Philippines

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A Cross-Cultural Study of Two Teacher Education Technology Classes: United States and the Philippines

A dissertation submitted to the

Division of Research and Advanced Studies

of the University of Cincinnati

in partial fulfillment of the

requirements for the degree of

DOCTOR OF EDUCATION

in the Division of Teacher Education

of the College of Education, Criminal Justice and Human Services

2005

by

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Abstract

This study explored the delivery of technology education in two countries. The participants were the professors and graduate students in each class. Sources of data included classroom observations, individual interviews with the students and the professors from each class and focus group discussions. The major theoretical framework used was Hofstede's cultural dimensions. Findings showed convergence in using constructivism in instruction. There was also convergence in views and problems met in utilizing technology in education. Divergence was observed in classroom dynamics and specific technology issues discussed. Cultural context is indeed an important component in instructional design, especially when planning for a learning environment involving diversity. This study also contributes to the significance of and guidelines for conducting international studies.

For my mother,

Mrs. Natividad Gabriel Magbag-Ladores

who

through her loving ways

taught me to have faith

in God

in friends

in myself

Acknowledgements

There is a Philippine fable about a *maya*, a small bird, who wanted to take a drink from a glass half-filled with water. Since the water did not reach the brim, there was no way the *maya* can drink given its tiny beak. Contemplating on it, the *maya* had a brilliant idea! The *maya* started dropping pebbles, and pebble by pebble, the water level rose until it was able to drink.

There were many who dropped pebbles in my goblet, and I am taking this opportunity to express my gratitude. I could not have finished this dissertation alone. This work is a celebration of diversity.

Let me begin by thanking my adviser and committee members- they dropped the biggest pebbles. My thanks to Dr. Piyush Swami, my adviser. His constant reassurance of his belief in me and my ability to finish this work pushed me onwards. Thank you to Dr. Estela C. Matriano, my Tita Estela, who sow seeds of dreams in me. In the first place, it was she who persuaded me to pursue doctoral studies in UC. Thank you to Dr. Annette Hemmings whose quick eyes zeroed in on relevant items in my findings. She went through my work with a fine-tooth comb, efficiently separating the rice from the chaff, walking me through the process of dissertation writing step-by-step, inspiring me with words. Thank you to Dr. Jeffry Gordon in whose instructional technology classes I discovered an unknown penchant for using technology. As my teachers and mentors, they are simply marvelous!

My thanks to my family: my mother, my brother Dave, my sister Annie and her husband Silver, their kids Veranne, Veralynn, and Anthony. I thank you for your love. To my father, may he rest in peace, for challenging me to do my best in my studies.

Sometimes sad things happen in life which may be bigger than we can manage. I am grateful that I have friends who helped me move on. Thank you to Dr. Leticia Ho, Dean of UP College of Education, for all her guidance. To my professors at the University of the Philippines, especially Drs. Nemah Hermosa and Dina Cristobal. They are my models of strength. To my college friends: Sol, Mae and Rea whose support were unceasing. To Celani, thank you for urging me to "think of happy thoughts!" To my high school friends, the V's: Sette, Mellie, Yael, Marie and Anlu – thank you for helping me remember who I am. To the faculty and staff of Learning Circle, the school I have established in the Philippines, thank you for graciously assuming my responsibilities so I can focus on my studies. Special thanks to Atty. Joy and Gem, Teachers Vicky, Wenine, Weng, Des and Ana. To my sisters in Christ, Ms. Carole Caparros and Anne de la Paz, thank you for all your kind concern, your wise counsel and encouragement.

To new friendships made in the United States, I am thankful. To Dr. Janet Bohren, thank you for walking an extra mile for me. To dear friends at the University of Cincinnati College of Education: Elif, Marietta, Rachel, Nithya, Elaine, Pat, and Amuna. To Grandfield whose intensity of focus in working on his dissertation I cannot match but which nonetheless inspired me - thank you for editing my dissertation, too. Dear friends at Scioto: Gloria, Karen, Amit, Manoj, Saurabh, Andrea & Dave, Sasi, Supa, and Pipin. Thank you for laughter shared, stress-relieving conversations, walks in the park, teas, dances and dinners. To my roommate, Mia Gatmaitan, thank you for putting up with all my quirks, for editing my dissertation (and my food), and for our adventures.

By the grace of God, my cup runs over and I am truly grateful.

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Chapter 1

Introduction

The dawn of the twenty first century has brought about the Age of Technology and Globalization. In this postmodern era, technology has increased mobility of people among different nations. It has also made global communication more efficient. Successful communication, however, depends largely on our cultural maturity. Cultural maturity refers to the depth of one's understanding of the world's cultures. With cultural maturity, one can recognize that each culture is equally valid in spite of the significant differences that they may have. However, what is unfamiliar may seem threatening. Thus, a lack of cultural understanding and respect for differences often leads to conflicts between people from diverse cultural backgrounds. With cultural maturity, we will be able to bridge the gap between these differences to promote peaceful negotiations and to minimize potential sources of conflict.

In the field of education, technology has triggered the onset of distance and online education. Through distance education, a professor in one continent can now communicate with students half a world away. Mobility also brings teachers and students from different countries together – either with teachers traveling to the students' countries for both long-term and short-term teaching, or with students visiting other countries to learn from the professors of the host country. Consequently, one must consider both the teachers' and learners' cultures when designing a program of instruction for ensuring its success.

A web search on the topic of cross-cultural studies in higher education shows that research studies that deal mostly with distance education or with universities having diverse populations (e.g. Australia, Singapore, and the United States). There is also a proliferation of studies involving technology in higher education. A search for cross-cultural studies in technology yields an interesting result: The majority of studies are conducted in the field of business. Upon the discovery of the huge potential of a global market, the business world is the first to acknowledge the necessity of cross-cultural studies. Ignorance of cultural differences brings about barriers to business negotiations. Hall (1990) mentioned situations where mergers for billions of dollars have fallen because of misunderstandings between American and Japanese businessmen.

Cross-cultural studies are very important in education as well. Educators all over the world will benefit from learning about what is happening in other learning institutions. However, cross-cultural studies involving the teaching of technology in teacher education in different countries are few and far between. This study makes a contribution in this area.

This cross-cultural study involved two graduate level teacher education technology classes. The students in both classes studied how to create web pages using hypertext mark-up language (HTML). The study explored how technology was taught to education students in the context of two countries: USA and the Philippines.

I am a Filipino who pursued doctoral studies in the United States. In this way I am both a member and a non-member of both groups. When I say I am a member of both groups, I mean to say that I have been a student of both a Philippine university and an American university. While studying in the United States, I became very interested in

finding out how the teaching of technology is being carried out in the Philippines. Given that many professors in the Philippines are graduates of American universities, I wondered whether the teaching of technology to education students in the Philippines would be similar to or different from the teaching of technology to education students in the USA. I also wondered what cultural factors and issues would come into play. Being a member of both groups also placed me in an excellent position to pursue this study. I am fluent in English and Filipino and I am also familiar with the dominant cultures in both countries.

One way of stating the problem pursued in this study was this: How is the teaching of technology in teacher education being done in two different countries? Although this was not a study on distance education or instructional design, the answer to this question is significant to instructional design in distance education and cross-cultural settings. Given that many universities of higher learning are going global, the answer to this question will contribute to the cost-effectiveness and success of future international programs. For example, many universities in the United States are inviting students from all over the world to enroll in their courses. Given the cultural differences, however, the needs of learners in other countries may not be addressed by such an instruction as effectively as the needs of US learners are addressed. Instructional designers can use information on student cultures and classroom dynamics of target countries in order to make the necessary adjustments and modifications for delivering similar content in a different context. This will ensure learning for students living in countries other than the host university.

Limitations of this study include the specific unit of analysis, which is a class in each country. As a qualitative study, this research does not aim to make generalizations. Rather, the study aims to describe how two technology classes having similar course objectives were taught in two countries: the United States and the Philippines. Both countries are culturally diverse with existing dominant and minority cultures. The discussions in this study are limited to each country's dominant culture.

The two classes selected for this study were similar in terms of course content and target students. Specifically, the two classes were for teacher education students at the graduate level. In both classes, the students studied web design using hypertext mark-up language (HTML). Participants in this study included the professors in charge of each class and their students.

Sources of data for this study include 6 classroom observations, one interview with the professor, and one focus group discussion for each class. There were also 3 individual interviews with students from the Philippines and 4 individual interviews with students from the USA. The audio-taped data were transcribed. Then all data collected in the study were coded using NVivo 2.0, a computer software program designed as a tool for qualitative analysis.

The findings showed convergence in the use of constructivism as an instructional approach to teaching technology in teacher education courses. There was also a convergence in the participants' views of the power of technology and of the issues and problems involved in utilizing it for instruction. Divergence was observed in classroom dynamics and in the specific technology issues discussed in class. The observations showed that culture has an important effect upon how professors conceptualize and

approach class discussion and students' participation in class. The findings support the contention that cultural context is an important component in instructional design, especially when planning for a learning environment that involves the participation of teachers and students from diverse cultural backgrounds. Building upon Crossley & Watson's (2003) work on international research, this study also contributes to the literature on the significance of and on the guidelines for conducting international studies.

This study is nested in three fields: technology, teacher education and culture. In chapter 2, I will discuss the current literature on these topics. In chapter 3, I will provide a description of the methodology used in the conduction of this study and of the two cultural contexts involved in it. The findings will be discussed in chapter 4. Finally, I will discuss the implications of these findings and offer my recommendations in chapter 5.

Chapter 2

Review of Related Literature

The great strides taken by technology coupled with a quickening spread of globalization bring about new challenges on the world's citizens. These challenges need to be addressed in the field of education. Addressing these new challenges ultimately leads to calls for reform in teacher education. In this literature review, I will first discuss the effects of globalization and technological advances on the world's nations, in the field of education, and in the field of teacher education. Afterwards, I will discuss how the different nations and the education sector are responding through cross-cultural research. This section will also include a discussion of research issues that cross-cultural researchers need to address. Lastly, I will discuss the implications of the literature that is significant to this study and of theoretical frameworks that I have used in this study.

The Impact of Technology and Globalization on the World's Nations

Technology and globalization are deeply intertwined. People are now more mobile due to technological advances in transportation. It is becoming more and more feasible for people to visit or work in places other than their home country. As individuals leave their home culture, they become more aware of it as well as of its similarities to and differences from other host cultures. Indeed, the advances in technology have brought about a renewed sense of globalization. With respect to this, Hofstede (2001) wrote that "not only will cultural diversity among countries remain with us, but the new technologies may even increase differences between and within countries. Ethnic groups arrive at a new consciousness of their identity and ask for political

recognition of this fact" (p. 453). Through technological advances, we are creating and sustaining a new global society.

Underneath this global society in which most nations are navigating, individual nations in the world are currently addressing two issues. The first one is the barrage of foreign ideas being introduced into the local culture through mass media. Foreign influences on the local culture become an impetus for constantly redefining which ideas to adapt and which traditional customs and beliefs the local culture should keep. The second issue is *diaspora*. *Diaspora* refers to the massive movement of people from developing countries to more developed countries in search of job opportunities and better living conditions. People in diasporic communities bring with them customs and traditions they want to keep while adjusting to the host culture. According to Ben-Rafael & Sternberg (2001), diasporic communities in Western societies may remain involved with their native cultures in networks across borders and continents, while still investing their best efforts in integrating into the host society. Mendoza (2002) had a similar notion. She wrote:

> Staking out spaces within nations not originally their own, they create peculiar challenges not only for themselves, but also for the larger communities they seek to be a part of, not to mention, for the homeland from which many of them continue to look to and derive - at once - a sense of identity and belongingness, as well as separation and a differing sense of subjectivity. (p. 2)

Both cases, however, have to deal with conflict and with the issue of Western *hegemony*. *Hegemony* means "the preponderant influence or authority over others." (Merriam Webster Online Dictionary). A concept closely associated with hegemony is

domination. At present, Western culture dominates the global arena. Huntington (1997) phrased it as "The West versus the Rest":

> The West is now at an extraordinary peak of power in relation to other civilizations. ... The very phrase *the world community* has become the euphemistic collective noun to give global legitimacy to actions reflecting the interests of the United States and other Western powers. (p.16)

Sternberg (2001) stated that "although it is true that modernization or globalization are not synonymous with Westernization or Americanization ... it should be acknowledged that the Western civilization or the 'American sub-civilization' exert a far greater influence on relevant developments than any other social groups" (p. 86). Galtung (2001) also equated globalization with Americanization. According to Galtung, the United States runs the world militarily and politically today, and to a very large extent, culturally. This is a major concern for ethnic cultures.

In the face of worldwide Americanization, how do non-Americans, especially non-Westerners, respond? Huntington (1997) enumerated three possible responses. First, some nations, such as Burma and North Korea, attempt to pursue a course of isolation to insulate their societies from corruption by the West. Other nations band-wagon by making a conscious effort to join the West and accept its values and institutions. The third alternative is to "balance" the West by modernizing without Westernizing. Whichever of the three options a nation would choose to take, each nation finds it important to define its national identity. According to Bauman (2001), contrary to popular beliefs that the identity issue is a residue of the pre-globalization times which

will become extinct as globalization progresses, this “frantic search for identity” is actually a “natural companion of globalization” (p. 482).

Defining cultural identity is one way with which nations address the issue of Western hegemony. Western hegemony is an issue because the meeting of different cultures often brings about conflict. Different cultures hold different values. Huntington (1997) predicted that the next pattern of conflict in the world will not be primarily ideological or economic, but cultural (p. 1). Hofstede (2001) also pointed to cultural values as sources of conflict (p. 432). At present, the proliferation of ethnic wars between different cultural groups both within and between nations attest to the reality of this conflict.

Globalization also has a huge impact on the choice of which language to use as a means of communication. Since the dominant culture in the global society is Western, more specifically American, English has become the lingua franca of the global society. McFarland (2004) wrote that this is just a matter of numbers: more people are speaking the dominant language and so it becomes a necessity for minority groups to learn the dominant language. According to this author, “a language is dominant because its speakers have power- economic, political, social religious, etcetera” (p. 73). Speakers of subordinate languages want a share of that power, for example, through employment. McFarland stated that the convergence moves in the direction of the dominant language rather than toward some middle ground (p. 73). At the worldwide level this movement is towards English. Those who wish to engage in international discussions need to be fluent in English. Citizens of different nations, therefore, work on developing their communicative competence in English. This, however, has implications on culture. As

one learns a certain language, one cannot help but imbibe facets of that culture. This has implications on local languages as well. McFarland noted that a disadvantageous consequence to this convergence towards English is that of the extinction of minority languages. As more and more children abandon the language of their parents in favor of a more "salable" language, a language may die out altogether and become extinct (p. 73). This is a dilemma that minority cultures face. According to McFarland, this convergence is a natural consequence of an inevitable social change. Another phenomenon presently occurring is that of hybrid languages. For example, there is "Taglish" which is a combination of Tagalog (a Filipino language) and English. There is also Singalese, which is a combination of Singaporean and English. At present, the use of hybrid languages are becoming popular in some nations.

As globalization continues, nations need to address cultural and language issues. Ideally each nation should find a good balance in putting together both traditional and modern values to come up with a culture that's uniquely theirs. For in the end, what we want is a truly interesting world that is culturally diverse. As Ben-Rafael and Sternberg (2001) wrote, contemporary globalization is characterized by the "constant strengthening of the interconnection of nations, societies and peoples" (p. 16). Similarly, Galtung (2001) believed that globalization may be seen as "an effort to build a world meta-culture *sui generis*, not by superimposing one culture on others" (p. 280).

Aside from cultural diversity, the global society is also characterized by huge advances in technology. People are now navigating not only a culturally diverse world but also one in which technology plays a central role. As Kellner (1998) wrote:

> We are in the midst of one of the most dramatic technological revolutions in history, changing everything from the ways that we work, to the ways that we communicate with each other, to how we spend our leisure time. This technological revolution, centering on information technology, is often interpreted as the beginning of a knowledge society, and ascribes education a central role in every aspect of life. (p. 103)

Technological advances in communication have generated a proliferation of information available worldwide to any person online in a matter of minutes. Such a barrage of information demands the development of new skills that will allow people to deal with information more effectively. Kellner (1998) stated that the present time demands that everyone develop multiple literacies. These include computer literacy, media literacy and cultural literacy. The need to develop competencies in these areas should be addressed by education.

Education in the Era of Technology and Globalization

These global changes of increasing diversity and advances in technology impact Education. Students need to be educated in two areas: culture and technology. First of all, navigating a multicultural global society requires the development of a deeper understanding of cultures and of positive attitudes towards diversity. Second, navigating a global society in which technology plays a central role requires the development of competencies in using technology.

Educating students about culture. Adams (2000) wrote:

> Education should be expanded so that basic literacy is joined by the 'second literacy' of 'learning to live together.' A global effort of education and training,

> supported by the United Nations, should empower people at all levels with the peace-making skills of dialogue, mediation, conflict transformation, consensus building, cooperation and non-violent social change. (p. 6)

These are the new skills that are necessary in a global society. Not only should students develop these skills, but they should also develop a deeper understanding of culture.

Johnston (1991) stated that "our times challenge us to a whole new kind of maturity" (p. 223). He wrote that people see things as black or white, good or evil, and the like. However, according to him, this *polar understanding* leads to conflicts since groups of people force their standards on others, and being different, the other group will come up short. There are a lot of gray areas when cultures and beliefs are involved, and this polar understanding fails to help people from various cultures to come together and work in harmony. Johnston emphasized that we need to gain "global consciousness" and "new ways of understanding relationships of all sorts" (p. 25). This new understanding, he wrote, demands not just personal maturity, but cultural maturity (p. 211). Lanik (2002) wrote that "the most important undertaking for our schools is no longer the promotion of tolerance toward other cultures, but rather to help young people to find their cultural identity while participating in education" (p. 87). According to Lanik, "the highest priority of intercultural learning should be the acquisition of cultural maturity" (p. 87).

What is cultural maturity? As a term, cultural maturity has been alluded to in literature though it has not been specifically defined nor quantified in the field of education. One definition has been that of Brooks (1995), who stated in his abstract that

"the mark of attaining cultural maturity is the willingness of individuals to explore the way other cultures live, value, and behave." Johnston (1991) talked about "being able to appreciate our common humanity" (p. 65). Cultural maturity reflects the depth of our understanding of and appreciation for the world's cultures. With cultural maturity, people gain the knowledge and skills that will help them to bridge their differences and to live in harmony.

Educating students in the use of technology. Technology is a powerful tool for teaching and learning. Technology by itself enables each student to access an unimaginable wealth of information. They must therefore develop information management skills such as locating information, judging the reliability and truthfulness of accessed information, and sharing information with others. Here are some examples of how the power of technology is being harnessed in schools.

In a secondary school-based project, Loveless (2003) studied a program called Art on the Net. This study explored the interaction between practicing artists, students and teachers using digital technologies in the visual and performance arts in school settings. On the positive side, the use of Information and Computer Technology (ICT) resources allowed interaction between students, teachers and artists. However, one problem they encountered was the adjustments that the participants needed to make towards learning how to use the new tools and media. Findings of this study indicate that it takes time to achieve the necessary familiarity with the technology tools.

Another study on the use of technology in educational settings was that of Allen, Garsow, Johnson, Martin, Montgomery and Olson's (1997). They studied the Four Directions Challenge program. Their findings show that the use of technology offers an

opportunity for Native Americans to tell their stories in their own voices through virtual museums, multimedia productions and culture-sensitive curricula.

Technology and the use of the Internet also support the teaching of foreign languages. In a study by Blake (1997), the quick and unrestricted access to authentic materials in the form of text, sound and images made an impact in the teaching of foreign languages. Blake, however, cautioned teachers to be very clear about how the technology tools would be used. According to him, the proper contextualization of technology use should be considered within a program. Technology should not be used just for its sake.

Teaching students about the Holocaust is another example of a great opportunity to harness the power of technology. In Hammer & Kellner's study (2001), the use of multimedia testimonies helped to

> Provide students with a sense of the horror, inhumanity, and magnitude of Holocaust. Oral and video testimony delivered by ordinary citizens, as well as political leaders, help(ed) demonstrate the human and personal dimension of history and dramatize(d) the effects of historical events on people. ... In the case of studying Holocaust, this deepening of understanding provides the opportunity to teach tolerance and promote a multicultural and antiracist curriculum. (p. 1)

Caution was given with regards to teaching within a well-planned context, developing the students' media literacy, and using engaging presentations.

Higher education also stands to reap the benefits of technology. Bair (1996) believed that technology would transform higher education. According to Bair, although changes may be slow, information technology breaks down barriers previously created by time and distance. He maintained that technology breaks down organizational barriers,

by-passing most institutional and government barriers to teaching and learning. He pointed out that at present, state systems of higher education are spending millions to expand distance education facilities which will allow students to have access to courses of interest regardless of their location or the location of the school. Having technology equipment, which Bair termed as the "physical presence of information technology," is an academic status symbol since "it can simultaneously signify both conservative status and a progressive spirit" (p.13). Teacher-centered classrooms have always been the norm. However, according to Bair, information technology will transform that. He predicted that Information Technology would continue to contribute to changes in the culture of higher education.

Recently, a most promising possibility to education at all levels is offered by videogames. Gee (2003), a cognitive scientist, acknowledged the fascinating power that video games have in engaging players for hours on end. Gee called on educators to look into video game design principles and to incorporate these in schools. Coenen (2003) agreed that "a new avenue for learning and education might be found in the tremendously popular computer games" (p. 201). Coenen observed that video games get players' motivation and attention quickly and that these games could become a real vehicle for learning through the inclusion of pertinent subject knowledge in the games. He cited two benefits of using games: the personalization of what is being learned and the very powerful interactive sessions they offer where the learner/player cannot remain passive. However, schools are far from achieving this. As Buckingham & Scanlon (2003) pointed out, the three main software 'genres' being used in education at present are drill and

practice packages, exploration/reference works and educational games. Interactivity of these three genres of educational software remains limited.

Globalization, Technology and Teacher Education Reform

Delors (1996, as quoted by Matriano, 2000) stated that:

> The importance of the role of the teacher as an agent of change, promoting understanding and tolerance, has never been more obvious today. ... The need for change from narrow nationalism to universalism, from ethnic and cultural prejudice to tolerance, understanding and pluralism, from autocracy to democracy in its various manifestations, and from a technologically divided world where high technology is the privilege of a few to technologically united world, places enormous responsibilities on teachers who participate in the molding of the characters and minds of the new generation. (p. 85)

The demand for educational reform naturally leads to calls for reform in teacher education. Future teachers need to be skillful in addressing the changes that are taking place in the world today. Over the past few decades, teacher educators have made several suggestions and proposals on different areas of teacher education. Focusing on globalization and technology, Matriano's (2000) framework is more appropriate for this discussion. Matriano proposed a three-dimensional framework or a triad for reforming teacher education. This triad consists of (1) The Human Being, which centers on the Learner, (2) Planet Earth, which is the Setting for Teaching and Learning, and (3) Technology, which is the Instrument of Instruction (p. 86). In this discussion, I will focus on two items in the triad: technology and the human being as learner.

Technology as the instrument of instruction. Matriano wrote that "education and training programs for instructional technology are developing as quickly as innovations become available in the global marketplace.... Teacher training is critical. Teachers must be literate and active users of technology" (p. 91). Research, however, shows that teachers are still on their way to becoming proficient in current technology. Bewick and Kostelnik (2004) claimed that there is strong evidence that many teachers basically ignore the computers in their classrooms. Cuban (2001) referred to computers in classrooms as "oversold and underused." In his study of Stanford University classrooms (of various levels from preschool to university), one of Cuban's unexpected findings was that less than 10 percent of teachers who used computers in their classrooms were serious users. Well over half of the teachers were non-users. Here is an ironic case of computers being available but not being used to their maximum value.

Muir-Herzig (2003) had similar findings. In his study of at risk students in grades k-12 in a Northwest Ohio high school, he found that technology use among the teachers in the sample is low and that the overall technology use had no significant positive effect on the grades and attendance of at-risk students. This indicated that technology is not being used effectively enough to have a positive impact on student achievement. For technology to be effective, Muir-Herzig wrote that schools must be prepared for technology use in the classroom. The best way to achieve this is to train pre-service and in-service teachers to become proficient users of technology. Teacher education, then, plays a very important role in achieving this goal. In fact, Information Technology and Teacher Education (ITTE) is now a scholarly and professional discipline (Willis, Thomson & Sadera, 1999). According to Willis, Thomson & Sadera (1999), this came

about due to the need for more sharing of information about exemplary work on technology in teacher education. There is indeed a need for more case studies on the educational innovations using technology.

The learner as a human being. Matriano (2000) wrote that "regardless of age, race, class, gender and other special qualities or difficulties, the learner deserves quality education. The challenge is how to humanize education and design a teacher education program that is responsive to the needs of the human family"(p. 87). Given that learners worldwide are of different cultures and given that diversity in terms of learning styles, gender, family and cultural backgrounds are present even within a seemingly homogenous classroom, pre-service teachers should definitely be trained in Multicultural Education. Otherwise, how can teachers address this diversity and affirm each human being with whom they come in contact? Unfortunately, not all teachers are given such training. A study of 30 education students by Jackson & Wasson (2003) showed that "a majority of these students were only minimally to moderately aware of the multicultural dynamics embedded in a critical incident in their life and unable to identify and/or name societal and systemic problems inherent in discriminatory practices" (p. 11). This study supported the contention that one's level of awareness, beliefs, and attitudes toward multicultural issues affect what one knows and how one processes one's experiences. Awareness and ability to think critically about multicultural issues are therefore very important. As Triandis & Singelis (1998) pointed out, "when such training is given, or when individuals naturally have the skills to place themselves into the framework of the other culture, they are interpersonally more effective" (p. 35). Reardon (2000) declared, "Properly prepared teachers would be able to guide learners through an inquiry into the

conditions that comprise a culture of peace, why such a culture is essential to the survival of human civilization and what changes in attitudes, values, behaviors and institutions will be required to achieve such a culture" (p. 34).

With education becoming more student-centered, the use of constructivist philosophy in teacher education is gaining ground. In this study, both professors used constructivism although only one of them, the Philippine professor, consciously verbalized her commitment to this approach. Constructivism describes "the central role that learners' ever-transforming mental schemes play in their cognitive growth" (Brooks & Brooks, 1999, p. 18). According to Brooks and Brooks, as a theory, constructivism powerfully informs educational practice (p. 18). Some of the proponents of constructivism are John Dewey, Jean Piaget, Lev Vygotsky, Reuven Feuerstein, Howard Gardner and Marian Diamond (Fogarty, 1999). Examining their works, Fogarty named seven elements that define constructivist philosophy: learner-and life-centered curriculum, enriched environments, interactive settings, differentiated instruction, inquiry, experimentation, and investigation; mediation and facilitation; and metacognitive reflection (p. 78).

Constructivism as a theory is not without critics (e.g. Winn, 2003). Despite criticisms, however, constructivism has widespread acceptance among educators. Constructivism has encouraged teachers and curriculum developers to alter their perceptions of children from "individuals who are irrational and unknowing to cognisant beings with well-developed theories" (Sahin, 2003, p. 68). Constructivism has been at the heart of most recent educational reforms, alongside the integration of technology in education. In the education of future teachers, world–wide reform efforts have focused

on adapting a constructivist philosophy, especially when it involves technology infusion. Below are four examples of reform efforts made in Taiwan, Malaysia, Turkey and Brazil.

In 1996 in Taiwan, the standards for elementary education of the Taiwanese new curriculum had adopted constructivist views on teaching and learning. In order to prepare elementary teachers for teaching the new curriculum, it was necessary for pre-service teachers as well as in-service teachers to experience constructivism (Chen, 2001, p. 261).

In Malaysia, Wong, Ab Jalil, Fauzi Mohd Ayub, Abu Bakar, & Tang (2003) conducted a study to measure pre-service teachers' attitudes toward information technology following their participation in an information technology course that was taught in a constructivist learning environment. In this class, the students collaborated to achieve their learning goals and to work on problem solving tasks. Students in the course were given authentic hands-on exercises, very much like projects, to demonstrate their ability in creating outcomes such as a brochure and a news bulletin. The results of this study supported the premise that infusing constructivism in teaching can enhance positive attitudes towards instructional technology.

In Turkey, Sahin (2003) studied a new course for elementary students. His findings supported the adoption of a constructivist approach. Constructivist activities in this study involved classroom observations, interviews with practicing teachers, research, materials production, and peer evaluation of the materials produced. A similar study was conducted by Joia (2002) in Brazil. Joia studied a socio-constructivist model for training teachers in the use of Informatics in education.

These examples show how world-wide efforts in teacher education reform adopt constructivism alongside the integration of technology. What could be the reason for this? One possible explanation is that with the introduction of computers in the classroom, along with its great potential as a learning tool, educators are finding themselves in a position that demands a departure from traditional ways of teaching. Riel, Schwarz, Peterson & Henricks (2000) pointed out that "placing computers in a classroom without the necessary support does not lead to exciting uses of technology" (p. 58). They believed that teachers need extensive familiarity with computers in order for them to develop a sense of ownership and empowerment. As it is in technology, ownership and empowerment are at the heart of constructivist philosophy. Hence, constructivist principles and the use of computers as tools for learning and teaching are complementary. This has significance in the larger picture of school reform. Cuban (2001) cited the transformation of teaching and learning into an engaging and active process as one of the goals of incorporating technology. He explained that:

> Sometimes called "student-centered teaching" or "constructivist practices," these forms of teaching ... are... essential for student learning in the twenty first century. To constructivist-oriented reformers, computers offer ways of motivating students to learn about subjects they would seldom engage otherwise and to come to grips with real world issues. Moreover, new technologies can create a deeper understanding of complex concepts by integrating different disciplines. (pp. 14-15)

The literature shows that school reformers who advocate the use of technology also advocate constructivism.

Responding through Cross-Cultural Research

Given the technology that is currently available, cross-cultural studies are becoming more feasible to do. According to Heyneman (2001), "the profession of education is slowly but surely shifting away from an exclusive interest in local experience for solutions to problems to looking at the problems and solutions to similar issues in other parts of the world" (p. 5). The advent of international education through distance education, for example, brings about the intrinsic difficulties in facilitating cross-cultural learning. As McPhree & Nohr (2000) stated, "global changes call for the development of new pedagogies with new communication technologies in ways which are sensitive to issues of cultural diversity" (p. 291). One of the best ways of addressing this issue is through cross-cultural research in teacher education.

Cross-cultural research began with descriptions of specific cultures or ethnography. If we were to go as far back in history as possible, the research studies done then were akin to travelogues. Most were descriptions of customs, beliefs and practices of a certain group of people. The information gathered through these would give an individual a good idea of what it would be like were he or she to visit a foreign place. Other studies are comparative in nature, focusing on finding similarities and differences between two groups. With globalization occurring in the last decade, the focus of cross-cultural research has shifted to interactions between groups of people with varying cultures. One major area of study is that of achieving successful communication. Given the huge potential of the global market, the business world is among the first to conduct cross-cultural studies. Hall and Hall (1990) emphasize the importance of learning about the culture of the foreign group with whom one is planning to make a deal.

The use of the Internet is definitely being maximized by the business world. Marketing research on web site usage is on the rise. This is a logical development since in the year 2003 predictions indicate that Internet shoppers will be spending US$380 billion online (International Data Corporation in Simon, 2001). Aside from an increasing market, the Internet also offers a more cost-efficient venue for doing business. Delta Airlines, for example, saved more than US$100 million in the year 2000 when they started offering electronic ticket sales (Simon, 2001). Producers, in their unending interest to understand the market, are very interested in finding out the efficiency of their web sites. One marketing research study, for example, explored how eastern and western clients perceive web design (Fink & Laupase, 2000). Another study explored the perceptual and satisfaction differences among cultures and between genders (Simon, 2001). The Internet also plays a crucial role in multicultural education. Leu, Kinzer, Coiro and Cammack (2004) wrote that insights from multicultural and cross-cultural education are going to be especially critical to our effective use of instructional technologies. They point out that the Internet permits us to construct new definitions of multicultural education and broadens the definition of diversity in the classroom to global dimensions. As Hofstede (2001) wrote, the new technologies, when wisely used, may be among the tools for intercultural learning (p. 453). If we take full advantage of these new opportunities possible through the Internet, we will be able to construct a truly global village among classrooms. This can show students the many advantages diversity bestows.

Where there is cultural diversity, there will be diversity in languages as well. According to Simon (2001), by the year 2003, the US share of revenues will decrease to

39% as other regions expand their Internet activities. In 2001, 57% of the 215 million global internet users designated English as their primary language. However, this percentage is decreasing. With the increasing Internet use by people from other regions, the issue of language becomes significant. Hillier (2003) explored the relationship that exists between language, cultural context and usability. He pointed out that the increasing number of multilingual websites presents a few problems in translation. These problems include agreement regarding the meaning of words, agreement on terminology, the direction of text, formats of such things as dates, times and names, and the choice of spelling conventions. To illustrate this point, Hillier used the following example. Take into consideration the request, "Please put the trunk into the boot." An American taxi driver will protest, saying this is impossible since the trunk of a car is much larger than any boot worn on the feet. On the other hand, this makes perfect sense to an Australian taxi driver. A 'trunk' in Australia is a suitcase and a 'boot' is the luggage compartment of a vehicle. Both speak English, yet there are cultural differences in meaning. Cross-cultural research can help identify potentially problematic areas.

As it is in the business world, globalization places a demand for cross-cultural research in education. With the deluge of information available and the possibility for an increase in research, educational planners, funders and consumers of education are increasingly expressing keen interest in international and comparative studies (Crossley & Watson, 2003, p2). According to Crossley and Watson, this is due to the fact that these educational planners, funders and consumers are finding themselves in need of learning how to deal with the implications of competitive league tables, market forces, and multiple innovations. There is a demand for more cost effective ways of increasing

access and improving the quality of educational provision. Thus, the field of international and comparative education is experiencing great growth. This "concern with global trends, dilemmas of international transfer of pedagogical practices, and the concepts of cultural and contextual differences lie at the very heart of this growing field of research (Crossley & Watson, 2003, p3)." As Crossley and Watson pointed out, "a revitalisation of the field of comparative and international education is stimulated by intensified globalisation" (p. 3).

Crossley and Watson (2003) also outlined several research agenda that are currently surfacing. Two of the research agenda they listed are the impact and application of new information technologies and implications of intensified globalization for educational reform (p. 73). Unfortunately, there are not as many cross-cultural studies on technology in teacher education. There are cross-cultural studies on teacher education or the use of technology in education, but cross-cultural research on technology in teacher education is still lacking. This is the area in which I wish to contribute.

One possible reason for the scarcity of cross-cultural studies on educational technology may be attributed to the intrinsic challenges of carrying out cross-cultural studies. Crossley and Watson (2003) pointed out that when getting involved with cross-cultural research, "a fundamental reconceptualisation of comparative and international research in education is essential, and this process has theoretical, methodological, substantive and organisational implications" (p. 10). Crossley and Watson are critical of contemporary research. They observed that too many comparative and international studies are poorly conceived and lack adequate sensitivity to contexts. To address these problems, they enumerated four issues which cross-cultural researchers should consider.

These are researcher bias, knowledge of the two cultural contexts, sufficient time, and fluency in both languages, including fluency in the nuances of the languages such as innuendoes and idiomatic expressions.

Crossley and Watson (2003) recommended that cross-cultural researchers be aware of several methodological issues involved in conducting their studies. First of all, there is the issue of researcher bias. Crossley and Watson wrote that all researchers, especially those involved in research across cultures or across national boundaries, need to be aware of potential biases and assumptions that they bring with them. They called this "baggage." They said that these assumptions inevitably influence how researchers view the 'other,' and how they document the similarities and differences that they perceive in different cultures. Crossley and Watson stated that such biases are not always easy to recognize, let alone to overcome (p. 36).

The second issue is that of purpose. Crossley and Watson (2003) recommended that researchers need to be well aware of what they are looking for and why they are researching it right from the beginning. Possible questions they can ask are: Is it for academic interest only? Is it to identify trends? Or is it for the purposes of reforming their own or other systems of education? Is it to test a set of hypotheses? Crossley and Watson emphasized that "unless there is clarity of purpose in this complex, multidisciplinary field, it is likely that much unnecessary material will be collected to the detriment of disciplined enquiry" (p. 38).

The third issue is context. This requires time. According to Crossley and Watson (2003), to understand an education system other than one's own in real depth, the researcher ideally has to spend a long time within that foreign context. They

recommended that researchers should at least do numerous repeated visits to the target setting until they have an instinctive feel for what makes the society tick: why decisions are arrived at in the way they are; who the powerbrokers are and so on and so forth (p. 39). As Crossley and Watson explained, "education cannot be decontextualised from its local culture, though this is so often the case when less disciplined (but often influential) cross-cultural analyses are carried out across many different countries" (p. 39). They gave the example of UNESCO's World Education Reports, which, according to them, identified trends in education across many systems. They mentioned that although UNESCO acknowledged national differences, they have "failed to provide explanations that will help us understand the reasons for the different contextual nuances" (pp. 39-40).

The fourth issue is language. Crossley and Watson (2003) stressed that language can generate major dilemmas for comparative and international researchers. They explained that:

> Even if there is an agreed working language in which the terms being used might appear at face value to be the same, words can have very different meanings in different contexts. The term 'school' has, for example, different meanings in the USA from its use in most European countries. At one level there is common usage, but at another it is more usual in the USA to talk about students at college or university as going to 'school'. This is not so in Europe. ... Familiar terms like 'community', 'participation', 'management', 'decentralisation,' and 'professor', also take on subtly distinct meanings in different cultural and political contexts. (p. 42)

Crossley and Watson (2003) added that this offers a partial explanation of why it is so dangerous for the developing world to accept the recommendations of bodies like the World Bank and UNESCO at their face value. These organizations have too often been based on Western thinking, concepts and rationales. In this case, Crossley and Watson pointed out that recommendations might not be easily adapted (pp. 41-42).

Since the majority of the world's nations are multi-ethnic and multilingual, it is very important for cross-cultural researchers to have the necessary language skills. Crossley and Watson (2003) agreed that few researchers can realistically expect to be fluent in more than one or two of the necessary languages, let alone understand the nuances of the different languages or ethnic groups within a country. However, they contended that "researchers working in such multicultural contexts should, at the very least, recognize the implications of these issues, and familiarize themselves with local customs and aspects of the language which might lead to confusion or misunderstanding" (p. 47).

There is, indeed, a need for carrying out cross-cultural studies. In this endeavor, however, we need to ask what theoretical frameworks should be used. While doing this study, finding a theoretical framework is the task I found most challenging. After an exhaustive research on available literature in education, I ventured towards cross-cultural psychology and cross-cultural sociology. I finally found the most appropriate framework for my study in the field of business.

When it comes to cross-cultural studies, it is Geert Hofstede's name that is on the forefront. Hofstede is among the top 100 most-cited authors in the Social Science Citation Index. His influence began with the publication of his book *Cultural*

Consequences in 1980. This book was the result of a series of multinational surveys that Hofstede conducted to explore employees' personal values related to their work situation. Now coined "The IBM Study" (Hofstede, 2004), Hofstede did this long-term study as founder and manager of the Personnel Research Department of IBM Europe from 1965 to 1991 (Simon, 2001). He used a database collected by IBM in its subsidiaries in 71 countries. This database contained scores on a series of employee attitude surveys held between 1967 and 1973 with a total of around 117,000 questionnaires (Hofstede & McCrae, 2004). According to Hofstede (2004), these surveys had explicitly tried to tap the employee's basic values along with their situational attitudes. It is also noteworthy to mention that these questionnaires were administered in 20 languages with minor adaptations. Based on these data, Hofstede (2001) derived five cultural dimensions and eight cultural clusters of nations. The five cultural dimensions are power distance, uncertainty avoidance, individualism/collectivism, masculinity/femininity, and time orientation. Power distance refers to the extent to which the less powerful members of organizations and institutions accept and expect that power is distributed unequally. Uncertainty avoidance refers to the extent to which a culture programs its members to feel either uncomfortable or comfortable in unstructured situations. Individualism/ collectivism refer to the degree to which individuals are supposed to look after themselves or remain integrated into groups. Masculinity / femininity refer to the distribution of emotional roles between genders. According to Hofstede, males and females assume different roles in masculine cultures while in feminine cultures, there is minimal role differentiation. Take note that this dimension in itself is a reflection of a masculine perspective. Long term versus short term orientation refers to the extent to

which a culture programs its members to accept delayed gratification of their material, social, and emotional needs. I will only use the first four dimensions in this research.

Similar cultural dimensions are also proposed by other theorists such as Fiske (1991), and Hall and Hall (1990). Allan Page Fiske (1991) proposed four basic models of social relationships: Communal Sharing, Authority Ranking, Equality Matching and Market Pricing. Fiske's thesis was that "people must use some kind of models of and for social relations to guide their own social initiatives and to understand and respond appropriately to the social action of others" (p. 3). These models may be used to plan possible actions and anticipate future actions by others, and to coordinate action within groups. Furthermore, these models may be used to evaluate actions when persuading, criticizing, sanctioning or negotiating. According to Fiske, people in a Communal Sharing culture are oriented towards the group. There is a relationship of equivalence among them and individual selves are indistinct (pp. 13-14). Authority Ranking, on the other hand, is "a relationship of inequality." People in such a relationship view each other as having varying levels of social importance (p. 14). On the other hand, Equality Matching is an egalitarian relationship. People view themselves as peers who are distinct but coequal individuals. Market Pricing is a relationship mediated by values determined by a market system. Individuals interact with others when they decide that it is rational to do so in terms of these values. In a Market Pricing relationship people denominate value usually in terms of "price" by which they can compare any two persons or associated commodities as qualitatively alike or unalike. According to Fiske, the US is a market pricing nation. Based on Fiske's definition, the Philippines appear to be authority ranking.

In analyzing cultures, context offers another significant dimension. Hall and Hall (1990) defined context as "the information that surrounds an event" (p. 6). Hall and Hall propose a dichotomy of high and low context peoples. They explained that a high context message is one in which most of the information is already in the person, while very little is in the coded, explicit, transmitted part of the message. A low context message is just the opposite. Examples of high context peoples are the Japanese, Arabs and Mediterranean peoples. They have extensive information networks among family, friends, colleagues and clients. In high context societies, normal day to day transactions do not require much background information. Americans, Germans and most of Northern Europeans are generally low context peoples. According to Hall and Hall, low context peoples compartmentalize their personal relationships, their work, and many aspects of day-to-day life. Consequently, each interaction in low context societies require detailed background information. The Philippines, like most Asian nations, is a high context society.

Hall and Hall (1990) also presented other key concepts they called "underlying structures of culture." These include the speed of messages, space, time, information flow and action chains. According to these authors, people are geared to either a slow message format or a fast message format, large personal space or small personal space, monochronic time or polychronic time, to the past or to the future. For successful intercultural communication, people should be aware of their own orientation as well as those with whom they will be working. By being aware of these differences in orientation, individuals can determine the proper speed of messages, the amount of space to keep during conversation, and what chain of events one can expect.

In this study, I will be using Hofstede's (2001) cultural dimensions since the Philippines is among the nations that he studied and the dimensions he proposed are more encompassing. According to Hofstede (2001), the Philippines as a nation is characterized by a large power distance and collectivism. The US culture on the other hand has low power distance and high individualism. Both nations are characterized by weak uncertainty avoidance and high masculinity. I will use this conceptual framework in discussing the findings on cultural differences and similarities between the two nations.

A limitation that I see is that these categories are helpful only to a certain extent. Notice that like Hofstede's (2001) dimensions, Hall and Hall's (1990) underlying structures of culture follow a dichotomous format. Both categorize nations and cultures as either this or that – masculine or feminine, monochronic or polychronic, past-oriented or future-oriented. In Hofstede's case, his graphs do show a continuum between the various polarities. However, we have to keep in mind that nations are as complex as individual human beings and that humanity cannot be as easily categorized as numbers. There's also cultural plurality in both the United States and the Philippines and these models represent only a general view of the dominant culture in each setting. In addition to these, there are also universal human values that are present across cultures. However, models do help focus people's discussions.

Another limitation of these models is that the global changes we're experiencing now are also effecting a global change in values. The World Values Survey (Inglehart, 1999), a survey of values and beliefs of 60 societies representing almost 75% of the world's population, indicated that deep-rooted changes in world views are taking place. According to Inglehart, as the lifespan of human beings are becoming longer due to

advances in medicine, a shift towards postmodern values is being observed. Postmodern values emphasize self-expression and a positive regard for cultural diversity (Inglehart, p. 223). Self-expression and respect for cultural diversity may be considered feminine values in the context of Hofstede's (2001) cultural dimensions. Hofstede himself pointed out that in the global society, feminine values are becoming more useful. He explained that with the ongoing information revolution, many old jobs are eliminated and the new jobs that are being created are ones that cannot be automated. Examples of these are jobs that require leadership, creativity, security, and human contact. Although masculine values are still necessary, in the last category which involves supervision, entertainment, keeping people company, listening, and providing emotional support and motivation, Hofstede contended that "feminine values are even superior" (p. 335). Thus, he predicted that worldwide change of values will lean towards femininity rather than masculinity.

In summary, globalization and the advances in technology are providing an impetus for cross-cultural research. There are huge changes in society that need to be addressed by the education sector. In order to do so, educational planners and reformers must have information which can only be gained through cross-cultural research. As Crossley and Watson (2003) pointed out, this field is indeed experiencing growth. However, they emphasize that there are methodological issues that cross-cultural researchers need to consider. These are researcher bias, clarity of purpose, context sensitivity, and language skills. The particular field in which I wished to contribute is cross-cultural research in technology in teacher education. The theoretical framework I used is largely that of Hofstede's (2001) cultural dimensions. The findings of this study showed that these frameworks, especially Hofstede's cultural dimensions, offer a useful

way of organizing and interpreting the data gleaned from the study. These findings also showed that although there was divergence in culture, there was convergence on technological issues in education.

Chapter 3

Methodology

This was a cross-cultural comparative-case study of two technology classes for education students, one in the United States and one in the Philippines. Sources of data for this study included, for each case: six classroom observations, one individual interview with the professor in charge of the class, individual interviews with three to four students, a focus group discussion with three to six students, and documents such as the course syllabus, hand-outs given in class, and student work samples. I will begin my discussion with researcher reflexivity, since this is a most important factor when conducting qualitative research (Finlay & Gough, 2003; Auerbach & Silverstein, 2003). I will then describe the research sites, including a thorough description of the cultural contexts of the two countries; my entree in each site; the data collection methods utilized; and the profiles of my informants.

Researcher Reflexivity

In this study, my role as a researcher was limited to that of an observer. No deception was used. However, the role of a researcher has important implications in qualitative studies. Finlay and Gough (2003) stated that "as qualitative researchers, we now accept that the researcher is a central figure who actively constructs the collection, selection and interpretation of data" (p. 5). These authors added that researchers no longer seek to abolish their presence. Subjectivity in research is not seen as a problem anymore. Rather, it is taken as an opportunity (Finlay & Gough, p. 5). However, it is critical that qualitative researchers practice reflexivity.

Researcher reflexivity is a goal of qualitative research (Auerbach & Silverstein, 2003). Auerbach and Silverstein define reflexivity as "examining the way one's own subjectivity influences one's research" (p. 27). One way of doing this is to address the four areas of concern that Crossley and Watson (2003) pointed out. These are purpose, context, language, and researcher bias.

Crossley and Watson (2003) recommended that researchers need to be especially well aware of what they are looking for and why right from the onset of the research. In my case, it was for academic interest. Having been a graduate student in two different countries, I found myself engaged in comparing and contrasting the Philippine and the American educational systems. Observing that the insights I was getting are potentially useful, I wanted to take that curiosity to a higher academic level of study. Given the context of widespread globalization and the internationalization of education, I thought that the comparison of these two educational systems would provide information that could be used by educational reformers, especially by those involved in teacher education. Specifically, I wanted to know how the teaching of technology to education students was being carried out in these two settings.

Crossley and Watson (2003) also pointed out that ideally, the researcher has to spend a long time within a foreign context in order to understand an education system, Having been a graduate student in both the Philippines and the United States, I believe that I am fully familiarized with these two cultural and academic settings. This was a major reason for my choice of these research sites. I am also fluent in Filipino and English, the languages necessary for the conduction of this study. My background knowledge of both cultures was indeed necessary as I found myself making adjustments

in order to collect the data. For example, knowledge of culture was most useful in selecting strategies for establishing rapport with the participants.

According to Crossley and Watson (2003), all cross-cultural researchers need to be aware of potential biases and assumptions that they bring with them (p. 36). As a researcher, I realized that I had to guard against judging which system was better. Instead, I decided early on to focus on what was going on in each setting and to find out why. Questions such as, 'How are the classes being taught in the two settings?' and 'What are the similarities and differences?' guided my research. I was curious to find out what cultural factors would emerge. Knowing that many professors in the Philippines were graduates of American universities, I was also wondering if there would be any differences at all. I had no idea as to what I would find, and that was what made this research most interesting for me.

Selection of Research Sites

For this study, I selected a technology class for teacher education at the graduate level in the United States and in the Philippines. Having been a graduate student in both countries, I was in a very good position to study these two sites. I was familiar with these two cultures and their educational systems. With these two countries in mind, I then opted to focus on a single technology class in each country. Since I was in the Curriculum and Instruction program with a major field of study in Instructional Technology, I chose a technology class for graduate students in teacher education. The two classes I observed were comparable in terms of course content. Before I discuss the data collection methods I utilized in this study, I will describe the context of my research study.

Context of Study: The Philippines

Culture and history are inextricably intertwined. A nation's culture cannot be discussed without touching on its history. Both, however, are affected by a country's geology and geography.

The Philippines is located at the heart of Southeast Asia. Geologically speaking, it is an archipelago of 7,107 islands of which 4000 are inhabited (Wikipedia, 2004). It is a tropical rainforest that is very rich in natural resources, including gold. The oldest skeletal remains found in the island of Palawan in the Philippines dates back to 22,000 BC (Rodell, 2001). However, accounts of Philippine history usually begin with the arrival of the Aetas. The Aetas are black aborigines who are believed to have come to the Philippines on foot, crossing land bridges that existed since the Ice Age. These land bridges no longer exist. The Aetas were then followed by Indonesians and Malays. In 3,000 to 2,500 BC, the Malays fled from political unrest in Borneo and came to the Philippines in wooden boats. The three groups lived in relative peace and were spread throughout the archipelago. Most of the islands are mountainous with dense tropical rainforests. This natural setting effectively separated the various groups, allowing the growth of a variety of indigenous cultures. The Philippines is rich in languages, with more than 100 distinct languages on record (McFarland, 2004).

The Philippines is also the Gateway to Asia. In the 1890's, the United States considered it the Key to the Far East (Wolff, 1960). Its strategic geographic position allowed the first Filipinos to be engaged in trade with several countries, especially India and China, from the 10th to the 14th century. In the 15th century, Muslim missionaries reached southern Philippines (Rodell, 2001). In the last few centuries, its strategic

location and its natural wealth have attracted several colonizers. Its diversity and thereby, lack of unity among its peoples, lend it susceptible to colonialization. Although Ferdinand Magellan was defeated and killed by Lapu-lapu in 1521, Spanish colonialization succeeded in 1565. It ended in 1898 when Spain ceded the Philippines to the United States (Rodell, 2001). It then fell under American rule for about fifty years, within which time it also fell briefly to Japanese colonialization. The very rich Filipino culture has therefore been influenced by several cultures: its first inhabitants, its trading partners, and its colonizers. The present-day Filipino is now struggling to define what it is that can be genuinely called "Filipino." In this struggle, a Filipino characteristic comes to the fore: Filipino ingenuity. The Filipinos, instead of choosing one or the other, like to come up with a way of combining everything they deem important or interesting and creating something uniquely their own. The Philippine jeepney perfectly illustrates this and can very well serve as a metaphor.

An understanding of an abstract concept such as culture can be augmented with the use of visual representations such as metaphors. Metaphors constitute the basic mechanism that allows humans to structure reality and to think (Gannon, 2001). This is particularly useful for travelers and business people navigating in cultures other than their own. Gannon wrote:

> Typically, the visitor is assaulted with new stimuli and experiences, and it is difficult to remember these 'do's and don'ts' just when they are needed! Clearly such guidelines are important, but they are merely pieces in the puzzle when trying to understand the values, attitudes and behaviors of any cultural group.

> Without a framework, the visitor can even believe that he or she is acting properly when, in actuality, he or she is violating deeply held values and customs. (p. xix)

Gannon (2001) proposed the use of metaphors as a framework for viewing another culture. He stated that "through the use of metaphors, we can begin to see the society in a new and different way and, it is hoped, in the same manner as its members do" (p. xix). A metaphor which I believe serves as a good representation of the Philippine culture is the Filipino *jeepney* (See Figure 1).

Figure 1. An example of a Philippine jeepney

The Filipino Jeepney

Spelled “dyip” in the Filipino language, the *jeep* or *jeepney* is an image that eloquently speaks of Philippine history, art, language issues, and most importantly, of characteristics and values of the Filipino people. Figure 1 shows an example of a *jeepney*. It is one of the most commonly used modes of public transportation. Rodell (2001) provides an excellent description of the *jeepney*:

> The most obvious form of Philippine folk art is the ubiquitous jeepney, that product of World War II found on virtually every major street and road in the country. The first jeepneys were quite literally U.S. army surplus vehicles that were refashioned for passenger use by extending the frame backward so that facing rows of bench seating could be installed. The jeepney holds about seventeen people – the driver and two passengers in the front and then seven, or more, passengers on each of the two long bench seats. After the original jeepneys went the rusty way of all vehicles, Filipinos continued to make their own by importing the engine and building a local body. As Filipinos began to make their own vehicles, the need for a decorative panache for the jeepney asserted itself, and the jeepney became mobile billboards for Philippine folk art. Each jeepney is specially painted and further individualized with additional lights; mirrors and reflectors; plastic streamers hung from antennae; hood decorations, such as standing chrome horses; letterings of favorite song titles; paintings of rural scenes or women in erotic poses; extra decals and chrome strips everywhere; the name of the manufacturer (usually Sarao Motors); and the

proud nickname of the driver, “Lover Boy,” “Jeepney King,” “Action Kid,” etc. In addition to its customizing, the jeepney will also display a license plate on the front bumper and a signboard across the top of the windshield giving the jeepney’s route for potential passengers to see.

The jeepney’s interior is like no other vehicle on the planet. Curtains are hung along the open sides of the passenger compartment, the ceiling of which may also be a canvas upon which additional paintings are found. In the front, the driver will frequently have a small shrine that includes a plastic icon of a saint, most often St. Christopher or Our Lady of Perpetual Help, upon which might be hung a sacrificial garland of the strong sweet smelling sampaguita flowers. Often, too, the driver will have miniature beer bottles glued to his dashboard along with a cassette recorder and a box for the tapes. Some drivers even install a small electric fan to lessen the city’s oppressive heat and foul exhaust gases that constantly invade the jeepney, since the vehicle is completely open to the hostile environment except for its windshield. Important, too, is the wooden moneybox holding the driver’s earnings, and the change needed for his customers. Somewhere among the driver’s collection of icons and personal amenities are the actual gauges for the vehicle, but these do not work and are irrelevant.

The passengers and driver enter into a communal relationship during a trip, with passengers helping each other on the jeepney, passing fares up to the driver and repeating a request for a stop in case the driver did not hear

> the passenger who asked to get off. Thus, in microcosm the jeepney displays the communal nature of Philippine society. (p. 57-58)

Rodell's (2001) description provides an ideal springboard to our discussion of Philippine culture. We can now match the image of the *jeepney* to Hofstede's (2001) cultural dimensions. As I have mentioned earlier, Hofstede (1980, 2001) characterized the Filipino nation as collective, masculine, having a large power distance, and having weak uncertainty avoidance.

Collectivism is the first thing that can be identified in the Filipino *jeepney*. As Rodell (2001) has stated, "in microcosm the jeepney displays the communal nature of Philippine society" (p. 58). Some characteristics of collectivist cultures include having high context communication (Hall & Hall, 1990), maintenance of harmony with one's social environment as a key virtue and the threat of shame as a method of keeping order (Hofstede, 2001). In the Philippine *jeepney*, there are unwritten rules that the driver and the passengers are expected to follow. These include lending each other help without the necessity of asking. For example, if a mother carrying a baby comes in, co-passengers are expected to lend a hand in bringing her bags in. Each passenger should also be conscious of the comfort of the rest of the group. This includes, for instance, taking care not to invade others' private space (though being a high context society, there is a relatively small private space one can potentially invade). Confrontational words are used as a last resort with irritated passengers conveying disapproval through stages: first through the drumming of fingers, then frowning, audible sighs, and direct stares. If one feels that he or she is the object of these non-verbal messages, one should check the perceived misbehavior quickly in order to maintain group harmony. Behavior is taken as

a reflection of one's education. Insensitive or rude behavior will earn a comment on one's lack of education. Since education is strongly valued, this comment is supposed to be an insult. Every person, including the *jeepney* driver, conforms to expected social norms no matter what level of formal education they have had. Valuing group harmony above all, the *jeepney* microcosm calls for certain courtesies. These include the use of courteous language. Though expletives or loud voices may sometimes be heard, passengers and drivers often speak in moderate tones of voice. Shouting is considered rude, and if perchance your request for a stop was made too loudly, the irritated driver may retort, "I'm not deaf!" Younger people, in a show of respect, add the words *ho* or *po* as they submit their fare or request a stop (e.g. *para* [stop] becomes *para ho*).

The *jeepney* also usually belongs to the whole family. One quickly realizes this because family members' names are written somewhere in the *jeepney*, and their pictures are tucked in on the wind shield.

Paintings of women in erotic poses and nicknames such as *Jeepney King*, and *Action Kid* allude to the masculinity of this culture. Some characteristics of a masculine culture from Hofstede's (2001) list of social norms include the maximum emotional and social role differentiation between genders (e.g. men should be tough and women should be tender), that men should be and women may be assertive and ambitious, sympathy for the strong, and admiration for objects that are big and fast (p. 299). In the world of *jeepneys*, drivers do take special pride in the size of their *jeepney* and in its bold design. A few *jeepney* drivers even enhance their vehicle with a truck's blow horn - so you hear this loud sound, look for a truck and find nothing but a small *jeepney*! Gender roles observable in the *jeepney* include the rare instances of female *jeepney* drivers and the

unacceptability of women hitching a ride by hanging at the back of the vehicle in rush-hour instances when most *jeepneys* are full. In contrast, men take this opportunity to show-off their physical strength.

Highly masculine nations also consider religion as most important in life. Unlike feminine nations where religion focuses on fellow human beings, religion in masculine nations focuses on God or gods (Hofstede, 2001, p. 330). The importance of religion in Philippine culture is apparent in the presence of religious relics located front-center within the *jeepney*. Hanging from the rearview mirror, one may see a Catholic rosary or a scapular. Right below it there may be an image of the Virgin Mother, lovingly decorated with sweet-scented jasmin-like *sampaguita* flowers. Brought by the Spaniards, Catholicism is the dominant religion in the Philippines. Of its 84 million people, 82% are Roman Catholic, 9% are Protestant, 5% are Muslim, and 3% are Buddhist (*CIA World Fact Book*, 2003).

The basic issue involved in the dimension of power distance is human inequality (Hofstede, 2001). Inequality in society can occur in areas such as wealth, prestige and power. High power distance nations, more willing to accept such inequality, are characterized by authoritarian values, authority based on tradition, and the value placed on conformity. There also exists a hierarchy of social positions, with a perceptible social distance between superiors and subordinates. Mendoza (2002) describes the *Great Cultural Divide* between the *ladino* class which includes the economic, political and intellectual elite and the vast bottom half consisting of the silent mass, more popularly known as the *masa*. Though the elite are not prohibited to board, the *jeepney* is undoubtedly for the *masa*. With its cheap fare rates, the working class is willing to endure

the relative discomfort of riding the *jeepney* whereas the country's elite can very well afford their own air-conditioned cars.

Uncertainty about the future is a basic fact of human life with which we try to cope through the domains of technology, law and religion (Hofstede, 2001) Different from risk avoidance which has something to do with fear, uncertainty avoidance has to do with anxiety. In a situation in which anything can happen of which one has no idea, what do the people of a certain nation tend to do? Countries with weak uncertainty avoidance, such as the United States and the Philippines, share the following values and psychological characteristics: less resistance to change, willingness to break rules when necessary, shared feelings of happiness, lower work stress, and easily readable facial expressions of sadness and fear (Hofstede, 2001, p. 160). Societal norms characterized by low uncertainty avoidance include suppression of emotions, openness to change and innovation, tolerance of diversity, comfort with ambiguity and chaos; and appeal of novelty and convenience (Hofstede, 2001, p. 161). The Philippine *jeepney* exemplifies innovation. Though the merry mix-up of personal paraphernalia and decorative elements may seem strange to the foreigner, the reality is that ingenuity and humor are intrinsic characteristics of the *jeepney*. The Filipino *jeepney* driver is fond of things that cheer him and his passengers up. These may include jokes, funny pictures, and humorous quotations. These items being dear to him, the Filipino *jeepney* driver finds a place for everything – the result being a *jeepney* generously, albeit chaotically, decorated inside and out. Chaos in relation to *jeepneys* can be observed further by the lack of specific pick up and drop off points. Hearing a passenger call out the request for a stop (*"Para!")*, the driver will immediately draw to a halt, even in the middle of a busy street. Rules are far

from appealing and *jeepney* drivers are notorious traffic rule breakers. Astonishingly, crashes do not occur often and the reason may very well be that being a high context society, Philippine drivers may disregard traffic lights but they are in actuality, following certain unwritten rules.

In summary, the dominant Philippine culture may be described as collective, high context, masculine, accepting of inequality, and tolerant of uncertainty. The *jeepney* illustrates the values of group harmony, family, religion, art, music and humor; characteristics such as ingenuity and machismo; and the reality of social stratification based on economic status in Philippine society.

The University of the Philippines

The Philippines' university system was developed based upon the United States' model, despite the country's vastly different cultural, political and economic setting (Smolicz, 2001, p. 246). The University of the Philippines (UP) is a case in point. UP was established in 1908 by Act Number 1870 of the First Philippine Legislature. In 2004, it is composed of six constituent universities and one autonomous college. Together, these have an aggregate of 48 colleges with about 37,000 students. Belonging to the top 50 universities in Asia, it is known for its excellent faculty and pedagogical approaches. Admission to this university is highly competitive. Given the fact that tuition fees are subsidized by the government, UP students are dubbed *Iskolar ng Bayan* (scholars of the nation). The university, therefore, plays host to the most intelligent Filipino students, the crème de la crème, rich and poor alike. Reflective of the dominant culture's ideals, the UP is in itself, an ideal setting highly dissimilar to most universities in the Philippines today. Smolicz (2001) wrote that UP, through its powerful Board of

Regents and institutional safeguards to protect its independence, plays a unique and dominant role in higher education in the Philippines.

According to Mendoza (2002) UP was "initially staffed by American faculty and administrators. The academic disciplines, namely, anthropology, geography, history, linguistics, philosophy, political science, psychology and sociology were imported directly from their prototypes in the U.S. academy. Later, when the continued hiring of expatriates became economically burdensome to American taxpayers, the U.S. colonial government decided to fund Filipino scholars for graduate studies training in the American universities abroad and have them take over the faculty posts upon their return" (p. 45). This practice of UP faculty members being sent abroad for scholarship and further studies continues to the present day. Many UP professors earned their degrees from American universities such as Harvard, Massachusetts Institute of Technology, and Indiana University. Others earned their degrees from Europe.

Originally the "prime locus for early US experimentation on colonial educational engineering" (Mendoza, 2002, p. 44), UP quickly evolved into the haven of the Philippine *intelligentsia*, the intellectual elite. Together, faculty and students are deeply involved in the scrutiny of all issues involving the Filipino nation (politics, linguistics, sciences, religions), in national leadership, and in the creation of indigenous knowledge (e.g. Philippine literature, Philippine psychology, Philippine history). It is the "center of wisdom" (Nemenzo, 2004) where "wisdom means the foresight and concern for the next generations." UP enjoys nation-wide respect and admiration. However, given the cultural divide and political red tape, the knowledge generated within its campuses has

difficulty reaching the “masa”, the people for whom such knowledge was generated in the first place.

Context of the Study: United States of America

The United States is the world's third-largest country by size (after Russia and Canada) and by population (after China and India) (CIA World Factbook). The US also has the largest and most technologically powerful economy in the world (CIA World Factbook) and is, at present, considered the sole world power (Encyclopedia Britannica Online). As a nation, it is consisted of 50 states and 1 district. Its form of government is a constitution-based federal republic with a strong democratic tradition.

The population estimate released in July 2004 is 293,027,571 with the following ethnic distribution: white 77.1%, black 12.9%, Asian 4.2%, Amerindian and Alaska native 1.5%, native Hawaiian and other Pacific islander 0.3%, other 4%. (There is no separate listing for Hispanics because the US Census Bureau considers Hispanic to mean a person of Latin American descent who may be of any race or ethnic group such as white, black or Asian.) This diversity in its population is due mainly to the country’s history of immigration. Beginning with its first settlers, the American Indians, the United States has experienced several waves of migration by people in pursuit of utopia. Many refer to this as the *American Dream*. Gray (1991) found this migration as an “affirmation of American values, of the global allure exercised by the ideals on which the nation was founded” (p. 15).

What are these values that characterize the United States? With such a diverse population, what makes a US citizen an “American”? Huntington (2004), a Harvard professor, identified these core values as America’s Anglo-Protestant Culture. He

clarified that his is “an argument for the importance of Anglo-Protestant culture, not for the importance of Anglo-Protestant people” (p. xvii). Concerned about the seeming “dilution” (p. 60) of this original culture, Huntington called on Americans to “recommit themselves to the Anglo-Protestant culture, traditions, and values that for three and a half centuries have been embraced by Americans of all races, ethnicities, and religions and that have been the source of their liberty, unity, power, prosperity, and moral leadership as a force for good in the world” (p. xvii). One only need to ask, said Huntington: “Would America be the America it is today if in the seventeenth and eighteenth centuries it had been settled not by British Protestants but by French, Spanish, or Portuguese Catholics” (p. 59)? For Huntington, the answer was no.

Gray (1991) shared a similar sentiment. For Gray, “the influence of the British, who held and ruled the original 13 colonies, is inescapable. The language, the system of representative government, the structure of law and the emphasis on individual liberty were all adopted from the Enlightenment ideals being formulated from what was once known as the mother country” (p. 16).

On the other hand there are the multiculturalists who call for the celebration of diversity. Disagreeing with the melting pot analogy of assimilation, multiculturalists prefer the salad bowl analogy. Multiculturalists promote a society of diverse cultures and peoples whose voices are represented and heard, and whose contributions are recognized by society. It is not an issue of “dead white European males” or DWEMs, as mentioned by Gray in his article. It is more of an issue of other voices, with ideas that are just as important and cultures just as valid, to be affirmed.

Taking a view opposite to that of Huntington and Gray, Gutfield (2002) wrote that "according to Turner's frontier hypothesis the source of American ideology does not stem from a certain political theory, or from the spirit of the Founding Fathers. It was generated from the conditions of the American frontier" (p. 34). According to Gutfield, the frontier process was characterized by constant renewal (p. xii). The history of the United States, he said, was the history of settlements adjusting to the ecological realities of the continent (p. xiv). He believed that this "reality of plenty" shaped the unique development of America. Gannon (2001), in describing American culture, also mentioned this availability of natural resources to explain the American fascination with tools and machines. He wrote, "The reason behind this fascination with tools is quite simple: America has historically been 'short' on labor and 'long' on raw materials. In order to use the abundance of raw materials, Americans had to substitute machinery and equipment for unskilled labor" (p. 217).

Following this line of argument, the question, "What about now?" begs to be asked. How about at the present age when the frontier has already been conquered? According to Potter (as cited by Gutfield), there is more than one type of frontier. There is the industrial frontier, the technological frontier, and the engineering frontier -- all opening new paths to other natural resources (p. 35). The frontier spirit calls for a culture of constant adaptation and the huge role of consensus among its people. This "frontier spirit", a characteristic of American Exceptionalism, may be held as identical to what Toqueville called as "newness" (Abbott, 1999). According to Abbot, "in his journeys to America, Toqueville sought frantically to discover this distinctiveness in American geography, in its frontier, in its national character, in its laws" (p. 100).

Counterarguments on the idea of America's uniqueness must exist. However, following this line of thought, it would seem that by keeping its frontier spirit, America may well be able to keep its greatness.

Overall, the United States of America is multicultural. However, common values and national characteristics do exist. In the midst of its diversity, what is it, indeed, that makes an American? In order to illustrate American culture, Gannon (2001) offered the metaphor of the American Football. He wrote, "Football is not only a sport in the United States but also an assortment of common beliefs and ideals; indeed, football is a set of collective rituals and values shared by one dynamic society. The outlandish speed, the constant movement, the high degree of specialization, the consistent aggressiveness, and the intense competition in football, particularly professional football, all typify the American culture" (Gannon, 2001, p. 211). It had been pointed out to me that baseball is an excellent metaphor for individualism in the United States, however Gannon quoted Kaufman as saying that "the growing complexity of business makes many corporate managers shy away from baseball as a metaphor. ... Many business leaders see their game as more like football, with its image of interdependent players with multiple skills cooperating to move the ball down a long field 10 yards at a time" (p. 209). Since my knowledge of baseball is also limited, I will go along with Gannon in using football as a cultural metaphor.

The American Football

Football as a cultural metaphor exemplifies Hofstede's characterization of the United States as a nation with low power distance, individualism, weak uncertainty avoidance, and masculinity.

Nations with low power distance, like the United States, believe that inequality in society should be minimized and that all should have equal rights (Hofstede, 2001, p. 98). Founded upon egalitarian principles, the citizens of the United States believe in equality among individuals. In the Declaration of Independence, equality is deemed "self-evident." Americans believe in the equality of opportunity. In football, anybody can be a star player so long as that person meets the requirements of becoming one, such as discipline and skills. Unlike in a monarchy, for example, where one's status at birth determines one's station in life, no such distinctions are made in the United States.

The United States had the highest individualism index value in Hofstede's study. Some characteristics of nations high in individualism include giving importance to personal lives, attaching more importance to freedom and challenge in jobs, holding individuals responsible for themselves, and attaching importance to autonomy, variety, pleasure and individual financial security (Hofstede, 2001, p. 226). In football, we can observe these characteristics. Football is a team sport, yet the individual is glorified and celebrated (Ganon, 2001, p. 211). In fact, all the major trophies in football are named after individuals who have contributed to the sport such as the Heisman Award and the Vince Lombardi Bowl (Ganon, 2001, p. 211).

In Hofstede's studies, the United States scored low in uncertainty avoidance. Nations low in uncertainty avoidance are characterized by higher satisfaction with home life, lenient rules, informal ways of addressing each other, hope of success, and preference for tasks with uncertain outcomes, calculated

risks, and problem solving (Hofstede, 2001, p. 169). As Gannon had written, "Success or failure in football is considered a direct result of a team's efforts. In other words, failure can be avoided, and it is up to the individual team to acquire success. Fans do not usually feel sorry for the losing teams. Losers are generally forgotten and ridiculed, whereas winners are glorified and praised"(Gannon, 2001, p. 212). How does one ensure team success? Through problem solving which in football occurs during the huddle. This is when the teams meet before each play to call a certain plan into action. Gannon pointed out that in the huddle, there are different players from diverse background and with various levels of education. During the huddle, all agree that the only way to achieve a certain goal is to put differences aside and cooperate objectively (p. 218). In American society, diverse groups of people often set aside their differences temporarily whenever there's a common goal that needs to be achieved.

The United States also has a high masculinity index. Such nations value challenge and recognition in jobs, advancement and earnings, and individual decision-making (Hofstede, 2001, p. 298). Work is also very important component of a person's life. Achievement is defined in terms of ego-boosting, wealth and recognition (Hofstede, 2001, p. 298). In football, the play's success depends on how well all the players perform. Yet there is frequently one player who gives an exemplary performance. Gannon explained that "this distinguished player is seen as making the play happen and receives most of the accolades for doing so" (p. 211). According to Gannon, many Americans fantasize about

becoming football players (p. 212). They seem to have it all: challenges, wealth, and recognition.

Fiske (1991) contended that the United States uses a Market Pricing Model. Market pricing nations are characterized by the centrality of making negotiations, comparing prices and finding better substitutes (p. 15). According to Gannon, professional football teams are actually multi-million dollar corporations subdivided into departments and divisions, each with a large, highly specialized staff (p. 212). He wrote, "each member of this football organization has one very specialized task. Each squad has its own coach or coaches, and there are also the medics, the trainers, the psychiatrists, the statisticians, the technicians, the outfit designers, the marketing consultants, and the social workers, all with specific duties and assignments" (p. 212). Gannon mentioned that there is even a person assigned to carry the coach's headphone wire throughout the game so that he will not trip on it!

This penchant for specialization is a special element of American culture. The ultimate goal of specialization is efficiency, a way of streamlining any process in order to speed things up. Efficiency, on the other hand, is a dimension of *McDonaldization* along with calculability, predictability and control through nonhuman technology (Ritzer, 2004, p. 12). Ritzer coined this term for "a wide-ranging process by which the principles of the fast food restaurant are coming to dominate more and more sectors of American society as well as the rest of the world" (p. 1). Working with the reality of McDonald's as a global icon, Ritzer embarked on a study of the fast-food industry process and discussed its widening spread, its growing importance, and its important implications on globalization. Take into consideration that globalization is also coined Americanization,

the world being a huge market must certainly be appealing to the United States with its Market Pricing values.

Ritzer was not the only one to criticize the process he called *McDonaldization*. Deegan (1998) considered going to McDonald's as an example of an American ritual. Another social critique, one of the things she did not like about McDonald's (and other similar organizations such as Disney) was the way they package *fun*. Deegan explained that fun in the USA is considered a dimension of private life. Its seductive character emerges from its "predictable capacity to generate short-lived, incomplete escapes from mundane routine." She recognized the increasing pressure to "have fun" in American society. Fun, she argued, "is a product of hyper-modern society" (p. 5). According to Deegan, this kind of fun only has the appearance, not the reality, of playfulness. Deegan warned that the global marketing of *fun* champions the spread of structural inequalities. A more in-depth discussion of Deegan's stand may be very interesting. However, for the purpose of this paper, suffice it to say that fun is an important element in American culture and that Americans like the idea of "having fun," even inside the classrooms.

The US University

The university in which I did my study is a state-supported Research 1 institution located in southwest Ohio, a Midwestern region in the United States. As stated in their university website, in a continuing upward trend during the last few years, this university has become a research powerhouse. It was founded in 1819.

There were several colleges in this university, one of which was the College of Education. The College of Education offered several programs including a specialization in Curriculum and Instruction, which offered courses in instructional technology and

instructional design. It was in this program which was within the Division of Teacher Education that I did my class observations.

Student population at this university is close to 33,000. There are about 5000 full time graduate students, 2500 part time graduate students, and less than 2000 international students. Divided into ethnicity, there are less than 4000 African American students, less than 1000 Asian students, and less than 500 Hispanic students. About 87% are Ohio residents.

Class Selection

I did my observations in the United States in January to March, 2000. Since I had no idea what instructional technology classes I will find in the Philippines when I conduct my field observations there come July, I decided to observe two technology classes. One was on static web programming. The other was on instructional design. Upon arriving in the Philippines in June, I approached the dean of the College of Education of the University of the Philippines. I requested her permission to conduct a study. She referred me to one professor. I went to see the professor and she agreed to let me observe her classes. She was teaching two sections of the same graduate level course. Initially, I observed both classes. One was held on Saturday mornings. The other was held on Saturday afternoons. The two classes were almost the same. Halfway through the term, I decided to focus on the morning class. This was purely for convenience since the university where I am conducting the study was quite far from where I lived. Observing the morning class will allow me to leave earlier and to have a safer journey. This was important since the months when I conducted my study were stormy months in which national highways may close due to flooding. The US class on static web programming

was a better match to the course the Philippine professor was teaching, so in the end, I selected that class for this study.

Entree

The participants in this study are the professors teaching the technology classes and their graduate students. After receiving approval from the Institutional Review Board, I went on to contact the professors to whom I introduced myself as a doctoral student conducting a dissertation study. I sought out the professors' permission and informed consent prior to the beginning of the class. (See Appendix A for a copy of the informed consent form.) I made arrangements with the professors with regards to the schedule of class observations I'll be making. I was there on the first day of class during which time both professors introduced me to the class. In both cases, I was introduced as a doctoral student conducting a study for my dissertation. I then gave a brief background of my self and my study. After that, I distributed informed consent forms and discussed the items enumerated in it one by one. A survey form requesting basic information about the students were also distributed. (See Appendix B for the survey form). This survey included questions on the students' willingness to be contacted, interviewed or to join the focus group discussion which will be held at the end of the term.

One month prior to the end of the term, I contacted the students who indicated their willingness to be interviewed and/or to join the focus group discussion. We set up a date for the interviews. I used both video cameras and tape recorders to record all the interviews. This way, I made sure that even if one system failed, I have a back-up. The video also provided context and facial expressions which I found most helpful during the process of transcribing. I made it a point to clarify with the informants that I alone will

view the tapes. This was particularly important for the Filipino informants who, generally speaking, are self-conscious in front of cameras. I also let the informants know that I will be using pseudonyms in all my transcriptions.

Profiles of Informants

United States

The Professor

Dr. Sam U has been teaching computer classes for about twenty years, beginning in 1980 when he got his first computer lab. He has been teaching this course for about four years. He explained that the course has "evolved a bit. Initially it started out more as surfing the web kind of course. And then as people got good at that they wanted more courses in that and so I started to teach some HTML mark-up programming."

His students described Dr. U as somebody who is non-intimidating, flexible, entertaining, energetic and someone who adjusts to their needs. In an interview for example, a student said, "Just that his down to earth manner makes the class very inviting rather than very intimidating. Many people are intimidated by computers and advancing technology. And I think he takes that fear away because you can ask him anything."

His students saw Dr. U as somebody who immerses himself in technology. In the focus group interview, Courtney explained, "I think he immerses himself in it. I mean, it is, you know, he says he's on the Internet late at night, he's on the Internet all the time…And his whole life is based around that." Debbie agreed that this is a good way to describe Dr. U. Debbie added, "That's his expertise. And I see him as a model in his expertise. I'm telling you he's good."

At one point, the group deliberated on what kind of preparation Sam does for his classes. Rob asked the group, "I guess most of you are teachers, but when, you know, I have some notes in each class that I'm gonnna go over and I'm gonna do this material. But you wonder what Sam's preparation for the course, for the night. (Group laughs.) What do you think that he has, brings with him or how he prepares?" Courtney replied, "It's in his head." Dianne contends, "He has a plan. It's not like he walks in there." Pam agreed by sharing an incident which happened a couple of weeks ago when she knew she'd be absent from one class. "I asked him through instant messenger what we're going to be doing this week and he hit most of the things that they talked about."

This perception of Dr. U as very knowledgeable was also pointed out by Dave during an individual interview. Dave said, "I think he comes from a learned standpoint sometimes. ... Well, I think that on the average you know, he doesn't swamp anybody. So I think he comes from a learned position. He's done it. He knows how to do it. And he's trying to show everybody." Overall, John put it in a nutshell with this statement he gave during the focus group interview: "I just think he's a unique person. Not just a good teacher but a unique kind of person that explodes in the classroom."

The Students

There were 21 students in Dr. U's class: 8 males and 13 females. It was a mixed group of students at the master's and doctoral level. Majority were in the Curriculum and Instruction program. Most of the students were also teachers.

Student Informants

Four agreed to be interviewed individually. These were Allie, Ben, Cathy, and Dave. All of them were in the Curriculum and Instruction program with an area of

concentration in Instructional Design. Allie was a 27 year old high school English teacher. She was at the master's level. Ben, 34, was also a high school English teacher. He was a doctoral student. Cathy, a 52 year old adjunct professor, was also a student at the doctoral level. Dave, 40, taught Computer Programming in a city high school. He was at the master's level.

Six joined the focus group discussion. These were John, Jane, Courtney, Reese, Rob, and Dianne. All of them were in the Curriculum and Instruction program with Instructional Technology as their major area of study. John was a 52-year-old Music teacher. He also taught technology classes. He was a doctoral student. Jane was a 28-year-old master's student. She was a project manager at an environmental agency. Courtney, 43, was a first year doctoral student. She was an assistant professor in Occupational Therapy at another university. Reese, 45, was in the master's program. She was an educational technologist. Rob, 56, was an instructor at a technical college. Dianne, 47, was a doctoral student. She was an assistive technology consultant at a rehabilitation center. She was also an educational liaison for Special Education.

Philippines

The Professor

This was the first time Dr. P was teaching in UP, and so this was also the first time that Dr. P was teaching this computer course. In an interview with her, Dr. P shared that she was not expecting to teach computer classes. She was hoping to teach curriculum classes. However, the unavailability of one other faculty member necessitated a shuffling of assigned courses and Dr. P had to take charge of four computer classes: two at the undergraduate level and two at the master's level. Dr. P

admitted that she's not a computer expert and saw her role as more of a facilitator. Dr. P earned her doctoral degree from Japan. She described how Japanese professors acted merely as guides. As a student, she stated that "I know what I want to do, that's what I will do. All I need is for the professor to tell me where to get the materials, if my ideas are correct, if my procedures are within the principles of good research. That's it." In an informal conversation, she also described how they went about doing their research studies in Japan, which was somewhat different from how research is done in the Philippines. She stated, "Their research approach is the other way round. They gather data first before the question. There will be so much data, so much data. And then, and only then, will they formulate the question, will they attempt to focus. So it takes time and it's very tedious."

The Students

There were 7 students in Dr. P's class: 3 males and 4 females. All of them were Educational Technology majors in the Master of Arts program. Five were full time teachers, one was a webmaster for the university library, and the other was a technology resource center coordinator at a private school. During work sessions, the students engaged in discussion with each other every now and then, using low voices.

Student Informants

Three agreed to be interviewed individually. These were Allan, Belen and Carla. All of them are master's students in the Educational Technology program. In his late 20's, Allan taught high school Business Education. Belen was a second year master's student. After four years of teaching English at a private elementary school, she was requested to teach Computers to third and fourth grade students. This made her decide to

learn computer applications on her own. Then she decided to enroll in a degree program in Educational Technology. Carla was in her late 40's. She had been an audio-visual coordinator for the past twelve years. She said she had been registering on and off in graduate school, but that this time she plans to finish the program.

Four joined the focus group discussion. Allan and Carla joined this discussion along with Ken and Pam. All of them were master's students in Educational Technology. Ken was in his second year. He taught elementary mathematics. Pam was a high school Physics teacher. Ken and Pam were both in their late 20's.

Data Collection Methods and Timeline

Data collection was done in two phases. During the first phase, I observed two technology classes in the United States for one term, from January to March of 2000. During the second phase, I went to the Philippines and observed a technology class similar to one of the two I have observed in the US. I observed this Philippine class for one semester, from July to September of the same year, 2000. The two classes I selected for this study were similar in terms of course content and target students. Specifically, the two classes were for education students at the graduate level. In both classes, the students studied web design using HTML. Participants in the study included the professors and their students.

Triangulation is very important in qualitative research. For this study, there were several sources of data used for this purpose. These were:

1. Six classroom observations - Field notes were used for documentation. All classroom observations were recorded on audiotape. Four classes in the United States and two classes in the Philippines were videotaped.

2. An audio-taped and videotaped individual interview with each professor
3. Audio-taped and videotaped individual interviews with four students in the United States and three students in the Philippines
4. A videotaped focus group discussion with six students in the United States and four students in the Philippines.
5. The course syllabus for both classes

Since this was a study of cultures, the focus group interview proved to be critical for this research. I agree with Auerback and Silverstein (2003) when they stated that group interviews are ideal for exploring collective cultural experiences. They explained that "people in group interviews resonate each other's experience, and one person often brings up topics that the entire group then explores" (p. 17). I found this to be true. There were rich information gleaned from the focus group discussions which I could not have come upon had I failed to have one.

The Philippine interviews were conducted in Taglish – the conversational language in this city. Taglish is a combination of Tagalog (on which the Filipino language is largely based) and English. Using this conversational language was crucial in maintaining a relaxed and friendly atmosphere during the interviews. Using Filipino or English alone as the language for the interview would have made it formal and participants would not have been as candid or as straightforward in such a setting. However, for the purpose of readability, in the discussion of findings in chapter 4 I have translated the portions of the interviews which were spoken in Filipino into English.

The collected data were transcribed using Microsoft Word. These transcriptions were then imported to NVivo 2.0 for coding. NVivo 2.0 is a computer software program

designed for analyzing qualitative data. Coding proceeded in several stages. First, I did an open coding in order to discover patterns intrinsic in the data. With open coding, I went through the data line by line, placing a rough label on each item as I went along. By "item" I mean a sentence or paragraph that conveys an intelligible idea which I feel can be safely categorized. As LeCompte and Schensul (1999) suggested, researchers need to isolate specific items before they can produce scientifically supportable interpretations of the data (p. 68). I then listed all the items I've isolated to form what I called the rough coding tree. I called it rough because the items are not yet organized. A quick study of the rough coding tree showed multiple instances of several concepts such as *culture*, *constructivism*, and *course expectations*. Indeed, these multiple instances were what I was looking for. LeCompte and Schensul called this the inductive process which begins after researchers have laboriously looked over, read repeatedly and organized the data. The inductive process produces items that "stand out because they occur often; are crucial to other items; are rare and influential; or are totally absent, despite the researcher's expectations" (LeCompte & Schensul, p. 69). I then organized these items into a data matrix. Using the matrix as guide, I proceeded to "chunk" the items to identify emerging themes. Auerbach and Silverstein (2003) define a theme as "an implicit topic that organizes a group of repeating ideas" (p. 38). A closer scrutiny of the results yielded another data matrix. Using this matrix, I matched the themes that emerged against the theoretical frameworks I was using. With the matrix and the framework, I created a more organized coding tree. I applied this tree to another round of coding. This process went on until the final data matrix, the results of the study, was achieved. I will present this table of research findings in Chapter 4.

Chapter 4

Findings

The units of analysis for this study were the two technology classes I have observed. The two classes followed a similar course of study. However, while the US course was an introduction solely to HTML, the Philippine class studied HTML along with other topics. In this chapter, I will first present a general description of the courses and how the professors taught in the two research sites followed by a more specific presentation and analysis of findings.

Course of Study and Class Description: United States

Static Web Programming was a graduate level course in which the U.S. students learned how to develop static, non-interactive web pages. It had a course credit of three units. The course had the following objectives:

1. Learn basic html programming and tags
2. Learn how to copy files to a webserver
3. Learn how to create instructional webpages
4. Learn how to create simple graphics for web development
5. Learn webdesign for creating instructional webpages

Students were graded based on a project they completed for the course: an instructional webpage. This project needed to demonstrate most of the key concepts learned in class. On the last day of class, the students presented their webpage to the entire class.

In an interview, Dr. Sam U, the professor, explained the rationale behind requiring the students to create an instructional webpage using HTML. He explained:

> Originally I want people to produce quality materials. And I had no illusions that they could produce base materials, for example, to do Mathematics. They're not going to be able to create codes to graph equations and things like that. But other people would actually provide those kinds of utilities on the net. ... What I thought that my students could [do is to] begin to aggregate those resources and basically provide a place where the students could go or their colleagues could go to their websites to find out about other resources. I also thought that in writing computer programs in HTML, they will have a greater appreciation for the effort and work it takes to do that and be somewhat less critical of particular webpages that they might see. And then third of all, I want my students to have fun. I think writing HTML programming is a fun thing to do. And I think that it's important for students when they come to university to not only be intellectually challenged, though it does intellectually challenge them. ... So those are my objectives.

The Static Web Programming class was held every Tuesday from 7:00 to 9:20 pm at a computer lab with 16 computer work stations for students. The computers were located on the sides and at the back of the classroom. In the middle were tables arranged conference style, facing the front. This was where students who prefer to work on their own laptops sat. There was one computer work station for the professor located up front on a stage. There were ten weeks in one quarter. The class met once a week for a total of ten meetings. Topics to be covered during each meeting were enumerated on a calendar of schedule that came with the course syllabus. Hofstede mentioned preference to open ended learning and having no time tables in weak uncertainty avoidance cultures.

This wasn't observed in this case. The professor followed the schedule as stated in the syllabus, with just a little adjustment.

Adopting a constructivist approach, Dr. U focused on problem solving. In an interview, Dr. U verbalized that he wanted to focus on problem solving since the students will be on their own after the course is over. The class typically began with students' concerns and problems encountered while using technology. They asked questions which Dr. U used as springboard for discussion. After that, Dr. U presented the day's lesson. He had specific topics to cover such as creating an image map. As he talked, he showed the class step-by-step procedure which the students followed on their own computers. He pointed out areas where error can be committed and warned the students against potential pitfalls. Halfway through the session, the class took a short break. After the break, Dr. U either continued the lesson or let the students work on their own while he moved around and addressed individual concerns. Cathy, one of the students, offered the following description: "It's being taught with a lot of teacher demonstration with the projection overhead. And the instructor gives us samples of how to do different coding and then we practice but we don't really do too much class time to practice. We practice a lot on our own. And, um, we have a textbook that we can read, too, as a reference." Allie liked the way that students can do the procedures on their own computers while the professor demonstrates. "He has a projector and a big screen. That really helps me out. Because while he's saying it, it's up there, and then we are all at our computers so we're able to do it, too. So you're seeing it, hearing it, and then you're doing it. And that's really helping me a lot." Dave and Ben described the class as lecture-oriented. "Mostly, it's lecture. Sam tells us the different key words, different functions that you're allowed to use. He

gave us a template to begin with. And he talked, I mean, he delved further into it. The tables, frames, imaging, image mapping, and so on." Ben would like some interaction with students. "So far, it's been very much lecture-oriented. Now, he'll pull up some of his own web pages and some of his own work. And he'll tell us where he got ideas or how he programmed something. And I like that. But as far as a lot of interaction among students, we really haven't got to interact a whole lot. But interacting with him as a whole group, we do get to. So maybe a little bit more interaction between students would be nice, but I really think he handles group discussion really well."

Overall, students I talked to acknowledged their appreciation for Dr. U's teaching style. According to them, they did not mind coming to class, the class was neither threatening nor intimidating, and that the class met their learning objectives. Dr. U's objectives for students to be intellectually challenged and at the same time to have fun were both met as well.

Course of Study and Class Description: Philippines

Computer Software in Education is a master's level course in which the Filipino students learned to use the computers in producing and evaluating software for educational purposes. With a course credit of three units in the given semester, the course had the following objectives:

1. Develop an appreciation and deep understanding of the educational importance of computers
2. Understand how computer technology transforms the teaching-learning process
3. Explore the internet and make a list of several educational websites

4. Develop an evaluation instrument for websites
5. Develop a teaching plan using one website
6. Design and develop a webpage with an accompanying teaching plan
7. Design and develop an educational software program using HTML, Powerpoint or other programs
8. Develop an evaluation instrument for educational software

Five requirements were listed on the course syllabus: (1) two major outputs – webpage and instructional software; (2) class minor outputs – list of criteria, list of webpages, evaluation instruments; (3) reaction paper and exercises; (4) attendance; and (5) lesson demonstration.

In an interview, Dr. P, the professor, explained the rationale behind requiring the students to write a lesson plan for the webpage and instructional software. She wanted them to do it "within the context of a lesson. This is not a computer technical course. This is a course on the proper use of software, development also if they can, in making your teaching-learning process more effective. In other words, [it's your] instruction, to make it more effective." The writing of lesson plans placed the use of computers in the context of instruction.

The Computer Software in Education class was held every Saturday from 9 in the morning to 12 noon at the computer lab with 30 computer work stations for students and 1 computer work station for the professor located in the middle of the lab. There were sixteen weeks in one semester. Excluding official holidays and other events, the class was scheduled to have ten meetings. Topics to be covered during each meeting were enumerated on a calendar of schedule that came with the course syllabus.

Dr. P consciously adopted a constructivist approach. She announced her intent in class by explaining how she planned to conduct the class. Dr. P informed the students that most of their time will be spent working on their own. Indeed, Dr. P provided a huge amount of in-class computer time in which students were actively engaged in working on their various projects. These were called *work sessions*. She gave one major lecture during the beginning of the semester. On the first day of class, she went over the course syllabus, constantly encouraging the students to give their comments. She then led a discussion on the role of technology in education and an analysis of the Philippine basic education curriculum. After a short break, she gave a lecture on constructivism. During this time, she verbalized her commitment to using a constructivist approach. She said, "So this class is based on that particular theory, constructivism." After this first major lecture, Dr. P spoke in class only occasionally to give feedback on student work, to clarify student questions on the requirements, or to discuss instructional design issues. Most of the time, students were engaged in work sessions.

Class discussions were generally teacher-led, with students responding to her questions. Students initiated interaction only when raising clarifying questions regarding the requirements. This is not surprising. Being a high power distance culture, we can expect teacher-centered education where teachers initiate all communication in the Filipino classroom. In fact, one of the Filipino words for *teacher* is *guro*, equivalent in meaning to the all-knowing guru.

During in-class work sessions, Dr. P stayed in her office, located at the back of the computer lab. She was open for consultation and had told the students that they can freely approach her if the need arises. However, I noticed that most of the time, the

students waited for her to come into the computer lab before they would approach her to submit their work or to ask their questions.

There were mixed reactions to Dr. P's approach. Some students appreciated the huge time devoted to work sessions. During the focus group discussion, Pam commented on the positive effect of this approach. "There's no pressure. You are working at your own pace. And then you come up with a good output. You know, we come to class excited to work on our projects. Even if there's no professor around, we're still working on it. And it's good." On the other hand, there were students who wished for more structure. Carla pointed out, "Sometimes when you're working, you need an answer from your teacher. [It has to be her because she's the one who is in a position of] authority." Here we see an example of a clash between the Philippine's weak uncertainty avoidance and high power distance. According to Hofstede (2001), when uncertainty avoidance is weaker, both students and teachers despise structure. They like open-ended learning situations with vague objectives, broad assignments and no timetable. This is why Pam appreciated the lack of supervision and the huge amount of freedom. On the other hand, students in high power distance cultures are dependent on teachers. Students like Carla, even at the graduate level, needed more guidance and supervision. Dr. P attributed this to grade consciousness. In an interview, she said that the students wanted the teacher's feedback because they wanted to get good grades. Grade consciousness can also be attributed to nations with high masculinity. According to Hostede, people from masculine nations place a great value on student performance in school. Being the best student is the norm and a great concern for grades can be expected. We can expect that grade consciousness will impel Carla to seek the professor's advice. However, since

there's a high power distance also, students like Carla will rather wait for the professor to initiate interaction rather than for her to see the professor in the office when guidance is desired.

Table 1 presents the summary of findings of this study.

Table 1

Data Display of Major Research Findings

Points of Comparison	Philippines	US
Classroom Dynamics	Students were often silent. They were concerned with social approval.	Students often asked questions. This was considered a part of taking responsibility for one's own learning.
Cultural Cognizance	The Filipinos were cognizant of their culture as well as Western culture. Culture was openly discussed. Discussion focused on "us" and "them."	Culture was not mentioned in class or during interviews.
Technology Issues Discussed in Class	When it came to integrating technology in education, the professor assumed a cautious stance. Language was a major issue in instructional design.	A predominant theme in the professor's discourse was the power of technology. It seemed as if he was selling this idea to his students. Discussion focused on prices and quality of software programs, hardware, and Internet access.
Views on Technology	Both groups showed similar views and concerns in terms of the role and use of technology in society and in education.	
Pedagogical Approach	Both groups used constructivism for teaching and learning technology.	

Classroom Dynamics: Philippines

Filipino students were often silent. They were concerned with social approval.

One of the very first things I noticed as I started my class observations in the Philippines was that the class was glaringly silent. While the students in the United States actively asked questions during class, the students in the Philippines kept asking questions to a minimum. This observation was quite apparent especially on the very first day of class when the Filipino students hardly spoke at all. Students rarely posed questions and when they did, they were barely audible. To further explore this observation, I decided to code three of the six class observations for questions raised during class excluding rhetorical questions, e.g. the "Okay?" that professors commonly punctuate their explanations with. The result of this coding is presented in Table 2.

Table 2

Number of Questions Asked by Americans and Filipinos during Three Class Sessions

United States (US)						
Class	Date	Number of Questions	Teacher-Initiated	%	Student-initiated	%
1	11-Jan	53	16	30%	37	70%
2	18-Jan	72	32	44%	40	56%
3	24-Jan	70	19	27%	51	73%
Average				34%		66%
Philippines (PI)						
Class	Date	Number of Questions	Teacher-Initiated	%	Student-initiated	%
1	7-Jul	56	45	80%	11	20%
2	15-Jul	49	44	90%	5	10%
3	29-Jul	22	15	68%	7	32%
Average				79%		21%

Taking the average of the interactions in three class observations, we can say that while the US students asked questions 66% of the time and the professor asked questions 34% of the time, the opposite was true for the Philippine classroom. The Filipino students asked questions at an average of 21% of the time, while the Filipino professor, at 79%, was initiating most of the conversation. This data can be illustrated better with the following graph (see Figure 2).

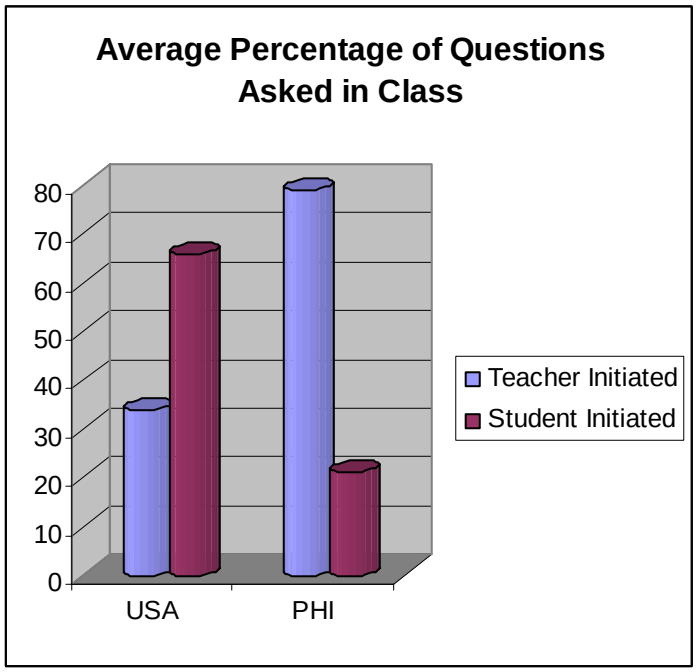

Figure 2. Graph of frequency of students' questions

As can be expected from a collectivist group, most of the student-teacher interactions were initiated by the Filipino professor. According to Hofstede, in collectivist groups, students will not speak up in class or large groups. He wrote, "In a collectivist culture, the fact of being together can be emotionally sufficient; *there is no compulsion to talk* unless there are emotions or information to be transferred" [Italics added.] Add to this the high power distance in the Filipino culture, it can also be expected that students will only speak up when invited. High power distance cultures are

characterized by teacher-centered education. Hofstede summarized this with the following statements: “Teachers initiate all communication in class. Teachers are gurus who transfer personal wisdom.” As I have mentioned before, one of the Filipino words for *teacher* is *guro*, akin to a sage. The Filipino professor, in many instances, did put a lot of effort into encouraging the students to speak. Take the following example when the professor was discussing the objectives and requirements of the course. She kept asking, “Do you want to delete anything? You don’t disagree with that objective? Or do you want to add another one? Are all the eight objectives amenable to you? Is this okay with you? Don’t be afraid [to speak]! This is graduate school. (One student gave an inaudible response.) Ah, okay. So for the meantime, this is okay with you. So we will just be very flexible along the way. If this really isn’t possible, we can change. Are you amenable to that? Is it okay with you? This is not a dictatorial class. I’m very open for anything because this is not my class, this is our class. Okay?”

I asked the students about this observation during our focus group discussion. When questioned about it, the initial response was that of agreement and acknowledgement that this observation was valid. Pam explained, “That’s our culture, to always stay quiet in one corner.”

During the focus group discussion, the reason the students gave for this silence is that of *hiya* (pronounced /he-yuh/). Carla explained, “Maybe, in general, it’s typical in the Philippines, among the Filipinos, for the *hiya* system to work. Even if you’re already in the graduate level or in the doctoral level maybe. It happens anywhere - in a conference, meeting, or in a classroom, seminars. During the first day, it’s really very

quiet. It's like, 'Whoops! I'll speak later.' Like that. I don't know for sure. That's my observation, okay?"

What is *hiya*? The U.P. Diksiyonaryong Filipino (Almario, 2001) defines it as *an emotion of being unable to express one's desires or objectives* [translated from Filipino]. The second definition is *the inner feeling of someone who has committed a sin, has done wrong, or has done something that is unacceptable to another* [translated from Filipino]. Based on what my informants have told me, I will say that *hiya* is a preoccupation with what other people will say. The nearest translation for this concept is *shame*. To feel *hiya* is to feel shame. To be in a state of *hiya* is to be in a state where one is conscious of one's actions and how other people may judge these actions. Here is a sample situation that the students used to explain this concept.

Ken: When it comes to things, like when you eat and there's some food left, you wouldn't want to take it.

Pam: Even if you want to.

Ken: Even if you really, really want to.

Minnie: So no one will take that piece?

Ken: Yes, nobody will take that piece.

Pam: Nobody will take that piece.

Ken: Because that's the only one left and there are several of you.

Minnie: Why? What's the reason for that?

Carla: What else but *hiya*! (laughs)

Pam: Because you're thinking of what other people will say. *Hiya*.

Carla: *Hiya*.

Ken: *Hiya*.

Minnie: They might say you're greedy?

Carla: Maybe. Or what. Maybe that's one. But no. It's really *hiya*. *Hiya*.

Pam: We're always after what...

Carla: Others will say.

Pam: What other people will say against us.

Hiya is something that has been deeply internalized by Filipinos. I asked the group how this came to be. Ken replied, "In the family."

Carla: That's in the family eh. In the environment.

Allan: Just like in school, it's the same way with the school. In the family, in school, so wherever you go, it will be the same way.

Hiya is indeed internalized and the internalization process occurs beginning childhood. According to Posadas (1999), Filipino parents strive to cultivate a sense of *hiya* within each child's inner self. She wrote, "Properly internalized, *hiya* will function as a mechanism of self-control throughout life, encouraging a Filipino to avoid unacceptable actions which might cause the loss of *amor propio* (self-respect) in the eyes of others. Labeled *walang hiya* in slang, the Filipino who lacks the sense of shame that places high value on winning the approval and avoiding the censure of others within the family or larger community will risk losing acceptance. The withdrawal of such approval is considered a severe sanction." (p. 46) Having internalized *hiya*, Filipino students will strive to avoid being sanctioned. During the focus group interview, the term the students used to refer to being sanctioned was *branding*. When asked why Filipinos value what

other people will say, Carla replied, “It’s because we’re afraid of being branded.” This concern for what other people will say is valid since *branding* does occur. A *brand* is a label attached to a behavior that has been perceived negatively.

Pam: Like, when there’s pizza. There are 8 slices and there are five of you. Of course there will be one slice left [in the end]. You’ll be urging each other, “Come on, that’s yours. Come on, don’t be shy, come on.”

Ken: Come on.

Carla: As we have said earlier regarding food, if there’s one piece left, if you eat that last piece, it’s because you’re greedy. (Group laughs.)

Minnie: Again? What was it again? When somebody eats it...

Pam: You’re greedy! There’s that. It’s automatically associated with a negative behavior.

Carla: Associated right away.

Ken: There’s something connected...

Allan: Associated right away.

Ken: There are people who are called, who are told, “You’re greedy.”

Minnie: Is it like, for each behavior, there’s a term associated with it?

Ken: Yes.

Minnie: Or a label?

Allan: Yes. A label, yes.

In general, students are very careful in offering an answer to a teacher's question. Due to the collective nature of the Filipino culture, students feel they should only speak when they are very sure that their answer is correct. The correctness, or incorrectness, of a student's response is deemed a reflection of the individual's intelligence, which is a reflection of the individual's person or self.

Ken: It's like, the answer the student has given, there's a stigma attached to the answer.

Minnie: Because the answer given by the student, it's like who he is? Is it like that?

Group: Yes, yes, yes.

Pam: It's like it is representing personality. Inside the classroom, it's like that. Can you imagine? In the elementary level it happens. At the graduate level, that happens, too.

Minnie: Once you're branded...

Carla: That's it. It's there.

In the situation given above, I believe that Ken was referring to instances when a student has given a wrong answer. Giving a wrong answer will make one appear stupid in front of the class, and in this way, one loses *face*. According to Hofstede (2001), *face* is another concept bred in the collectivist family. He states, "Losing face, in the sense of being humiliated, is an expression that penetrated into the English language from the Chinese; English had no equivalent for it." According to Ho (1976, as cited by Hofstede) "Face is lost when the individual, either through his action or that of people closely related to him, fails to meet essential requirements placed upon him by virtue of the

social position he occupies." Being a student is a position of honor. It is a privilege. With education being highly valued in Philippine society, a young individual who is a student earns the approval of the elders and the admiration of peers. However, there are high expectations placed upon a student. As a student, one is expected to come to class prepared. This means that the student should have done all assigned homework. The student should also have done advance readings in anticipation of the teacher's discussion questions. Students who give wrong answers then are either lazy (they did not do their readings) or dim-witted (they failed to comprehend). Both options will cause a loss of face. Another factor is how teachers react when a student has given a wrong answer.

Allan: One of the factors there is the teacher. Because the teacher usually praises the student only when the answer is correct. "Very good, the answer is correct." Like that.

Carla: And when the answer is wrong, the teacher goes, "What? Huh?" I'm not sure if you've experienced that. Something like, "And where did you get that answer?" ... Even when the class is over, as you leave the room, your classmates, all of them...

Ken: Makes fun of you.

Pam: There's a lot of teasing. But that doesn't only happen in the lower year levels. Remember, in one of our [other] classes? There's a student who gave a wrong answer and another student who gave the correct answer. The graduate professor, upon hearing the correct answer goes, "Now you're thinking!" But

> the first girl [who answered] was also thinking. If it were me, I'd be mortified!

Wittingly or unwittingly, teachers become branding agents, as the example above illustrates. To avoid embarrassment, students will often state that they will just attempt to answer a teacher's question. Pam explained, "In the Filipino culture, a young student, a young Filipino student is afraid of being rejected. It's because of this fear of rejection that's why every time they recite, every time they give an answer, it should be correct. That's what they want. So that if they're not really that confident in giving their answers, they will say, 'This is just an attempt. I'll just try.'" Allan added his experience with high school students. He said that even in high school, "Those kids, even those we call the 'creme' section, section A, whenever you call them to recite, they won't do it right away. Instead, they'll say, 'Sir, try only.'" Pam agreed, "[They'll say,] 'Sir, try only. Just an idea.' And they always ask, 'Isn't that so?' Or, 'Is that correct?' [They] know it's correct, right? It's like [they're] always looking for an assurance that, yes indeed, that's correct, go on."

Branding is a form of rejection. A brand is considered a stigma which stays for good. It is not something to be forgotten by the rest of the group and it puts the branded person in a state of shame. In the classroom, branding may occur quietly among the students and is directed to another student without his or her knowledge. Hofstede (2001) explains, "Shaming – that is, invoking the group's honor – is an effective way of correcting offenders. They will be put in order by their in-group members." Branding is a way of correcting an offense. Pam described a situation in another class wherein a

fellow student was branded by another. In this case, the offense was that of showing off or attention-seeking. When one raises one's hand to recite too often, then he or she is showing off or is seeking too much attention.

Pam: Every time the professor asks, "Do you have questions?" She'll be the first one to raise questions. Until such a time that, I was sitting at the back then, there's a man sitting behind me, he said, when she raised a hand again, he said, "Hmnh! This is too much! That's enough. She's always like that." So maybe, because of, somehow, you'll think, what if that happened to me? So therefore, in other classes, you'd behave the same way. You are trying to hold back all your questions. You are trying not to participate. Something like that. Because you're afraid already.

Ken: But there are also those who are just assertive, right?

Pam: Yes, but not everybody understands that. Not everybody will take it positively and say, "She's just assertive." Often it comes out as showing off.

Ken: Or attention-seeking.

Allan: Right.

Awareness of branding leads to a concern for what other people will say, and it is indeed an effective way of making individuals behave in an acceptable manner. This awareness, this *hiya*, is deeply internalized. Pam said, "It's something like we're afraid

that our colleagues will say something about us. They won't really say anything, but you have that in mind. You keep on thinking that they might."

Rodell (2001) wrote, "Since the Filipino is raised to consider himself and herself as being at the center of a closely related kin-group, the feelings and needs of its individual members must be respected so that everyone will participate in the activities of the whole. As a result, the child soon learns that conflict is something that must be avoided at all cost and that the supreme objective of interpersonal relationships is that they be conducted as smoothly as possible. Disagreements are kept to a minimum and are dealt with by negotiations intended to preserve the self-esteem of all parties. Should conflict divide Filipinos, the consequences can be devastating and longer lasting than in American society, which expects an interplay of competition and conflict that will eventually lead to a resolution. In the Philippines, conflicts have the potential for creating permanent ruptures between individuals causing a shame (hiya) that cannot be mollified and destroying group cohesion."

This desire for group harmony and fear of rejection leads to *sizing up the situation*, an activity where one closely observes one's teacher and classmates. This can be observed during the first day of class and during gatherings where people meet for the first time, such as conferences and conventions. Silence is a strategy for sizing up the situation. First, they size up the professor.

Carla: It's like, you're still assessing the teacher's behavior.

Discretely.

Ken: You're studying her.

Minnie: You're studying her actions?

Ken: Her actions, yes.

Carla: Because it's the first time. You observe her. Because there are professors who, from the very first day, are already commanding. So on that first day, as for me, at first I'll just be quiet. I'm still observing the teacher's actions. Whether she's approachable or if she keeps a distance.

Minnie: What else do you look for?

Carla: If she's on time (laughs). Punctuality?

Pam: If you also need to be punctual? (group laughs)

Carla: (We also look for) subject mastery.

Ken: Content.

Carla: On the very first day, it's the personality that you're observing. Although you know that in the long run, your first impressions may be wrong.

Next, the students will size up the group – in this case, the class. Ken explained that "This is especially true if you don't know your classmates also. It's better if you have classmates you've had before and you know them already. But if it's the first time for you to have them as classmates, you'll be extra careful as to what they may say about you."

Minnie: Why do you need to be careful?

Pam: Well, precisely because they have never been your classmates before.

Minnie: What's the worst case scenario? What's the worst thing that can happen?

Carla: Nothing.

Pam: Be called a show off. Like that. Comments like that.

(Group agrees.)

Pam: We're always trying to avoid comments like that.

I clarifed the phenomenon of silence.

Minnie: So be quiet, only on the first day. Am I correct?

Carla: Maybe during the first day in the classroom that's really typical.

Ken: Conferences, seminars, classrooms, they're the same way.

Pam: You're trying to size up the teacher, the speakers, the situation, and the rest of those sitting with you. Yes. It's that way.

Given this context of shaming and branding, silence can be considered a smart strategy in the Filipino classroom. However, in the western culture dominated global arena, silence may be taken as failure to understand or refusal to take responsibility. It may even be considered abnormal! (Hofstede, 2001) According to Hofstede (2001), in an individualistic culture, when people meet they feel a need to communicate verbally. Social conversations can be depressingly banal, but they are compulsory. Instead of silence, asking questions and making clarifications are considered important learning strategies (O'Malley, 1995; Oxford, 1990).

On the other hand, in the collectivist classroom the virtues of harmony and the maintenance of face reign supreme. Neither teachers nor students should lose face. (Hofstede, 2001) In the Filipino culture, avoiding the loss of face by any member of the

group is called *pakikisama* (pronounced /pah-kick-kiss-sam-mah/). Rodell (2001) defined *pakikisama* as "a social value which requires members to go along with the others for the benefit of group harmony. It serves as a guiding principle governing family relationships and interactions in the wider community." (p. 196) Posadas (1999) defined pakikisama as "the ability to get along with others." She wrote, "Filipinos also prize *pakikisama,* the ability to get along with others. Filipinos are expected to seek consensus and defer to the wishes of the group rather than pressing individual preferences." To preserve group accord, Filipinos typically try to avoid confrontation and abstain from expressing opinions or providing information that might be disruptive of cohesion. To counteract silence, a speaker will do well to make use of *pakikisama* which is closely related to *hiya*. This was what the group said when I asked them what finally got them to respond to the professor's questions.

Pam: When nobody was volunteering a response, she kept at it. She kept asking and asking and finally, we had to give a response.

Minnie: What was it that finally got you to respond?

Carla: *Pakikisama*, right?

Ken: Yes, *pakikisama*.

Pam: And *hiya ... that nobody's responding.*

Pushing, prodding and a lot of encouragement will ultimately get the Filipino audience to participate. The professor employed this strategy in class, often saying, "Any questions? Comments? Don't be afraid to speak!"

This information is useful for teachers from more individualist cultures who are sent to more collectivist environments. Hofstede (2001) stated that "a typical complaint

from such teachers is that students do not speak up in class, even when the teacher puts a question to the class. For the student who conceives of him- or herself as part of a group, it is illogical to speak up without being sanctioned by the group to do so. If the teacher wants the students to speak up, he or she should address particular students personally" (p. 235). Teachers from individualist communities should keep in mind that when they are dealing with students from collectivist backgrounds, it will take a lot of prodding and rapport building to finally get the students to talk. It will also be important to be supportive and accepting of answers, for corrections and criticisms are not taken lightly.

Classroom Dynamics: United States

US students often asked questions. This was considered a part of taking responsibility for one's own learning. As mentioned earlier, while the Filipino students asked questions at an average of 21% of the time and the Filipino professor initiated most of the conversation, the opposite is true for the US class. US students asked questions more often than their professor did. What kinds of questions did the US students ask during classes? There's a wide variety of questions asked during class. Students asked about the prices of commodities and types of hardware. For example, "What is the price of the ADSL? Is it $120?" One student asked about CD burners and what the professor recommends.

Some student-initiated questions were requests for information, explanation, clarification or permission. Here are a few examples: "Do ISP's normally give you web space?" "Does DVD read CD-ROM?" "What's a voice modem?" "In your syllabus, it says *Static Webpages*. What does that mean?" "Is JavaScript like Java?" Some students asked for help with writing HTML codes.

Some student-initiated questions were actually a way of offering a comment they have regarding the topic being discussed. For example, there was a student who offered a potential solution to the problem at hand by asking, “What if we put backslash p at the end of the line?”

Some questions seem to have been brought about by curiosity or interest on an anecdote being shared by the professor. One time a student asked, “What was the problem?” To which the professor responded by continuing his story.

Students also initiated interaction when they wish to bring up a problem they met while working on their own. Or they may be running the procedure in their head and they asked questions to clarify a step they needed to make that may not be very clear at the moment. These questions were often in the form of *what if*. For example, a student once asked, “Sam, let me ask you. If you didn’t change 5, didn’t change 4, 3, 2, 1, it would not use the Arial?” To which Dr. U replied, “Okay. Let’s look at that. That’s an interesting question.”

Sometimes, a question was given in a teasing way, more like a banter. This, however, showed how comfortable the students were with the professor in this class.

Dr. U: How anybody can do anything [so stupid]…

Student: Do you? (Students laugh.)

Dr. U: (Laughs) You got it! Many times.

Why do American students ask more questions than Filipino students? Using Hofstede’s cultural dimensions, we know that there’s low power distance among Americans. Unlike in the Philippines where professors are persons of authority, American professors and students maintain a certain degree of equality between them.

The US students called Dr. U by his first name, Sam. On the other hand, it is unthinkable for Filipino students to do such a thing. In Dr. P's class for example, students always addressed her as "Ma'am."

According to Hofstede, in American classrooms, students are supposed to ask questions. They are expected to initiate some communication. There's also weak uncertainty avoidance in American culture. They can accept a teacher who says, "I don't know." In fact, after saying "I don't know," Dr. U would often invite the students to explore. "Let's find out," he'll say. If professors can say, "I don't know," it follows that students are also not expected to know everything. Therefore, students can be very comfortable asking questions about things they don't know. In Dr. U's class, students often asked questions of this nature, e.g. "Is underline the same as u?"

The US is highly individualistic (Hofstede, Hall & Hall, Fiske). According to Hofstede, in nations that are high in individualism, silence is abnormal (p. 229). Students are expected to take part in the discussion, which is considered part of their responsibility as a student. In an interview with Dave, he called this sense of ownership of learning as "entitlement". Dave explained:

> Entitlement means responsibility for your own learning. So I mean, if I come in to a class, you know I ask a lot of questions, sometimes they're not something that... I'm one of those types that probably lead him down the avenues that he may not want to go because he doesn't have the time and he has set certain goals and certain objectives that he wants to meet with that class. I consider that when I ask questions I'm putting some entitlement into what I'm doing here and that I'm sitting in this seat and being in this classroom. If I just sat there and just

observed, absorbed everything he taught, I don't know there's much entitlement. I'm just being a sponge. You know. But I think if I take active participation and ask questions, I'm taking a responsibility for my learning.

In individualistic nations, individual initiatives are encouraged. Dr. U often praised students who offered a suggestion or an idea. Most of these suggestions came in the form of questions. For example, a student once asked if one can add or subtract directories to which Dr. U replied, “Yes, you can if you want to do that, and that's a good point.”

The US as a nation is also characterized by high masculinity. According to Hofstede, in nations that scored high on masculinity, student performance is deemed important (p. 306). On the other hand, in feminine cultures, what is deemed important is the students’ social adaptation. In masculine nations, Hofstede wrote that “failing in school is a disaster” (p. 306). He said that students try to make themselves visible in class (p. 303). I saw this happen in the US classroom. The US students made themselves visible by asking questions and volunteering opinions. We can surmise the same from Dave’s explanation given previously. He said that for him, a good student is one who actively participates which can be achieved by posing questions in class. When it comes to schooling in masculine nations, the students’ own problems are also “taken very seriously” (p. 306). Since the students take the technological problems they are meeting when they are working on their own seriously, and they know that the professor will address their concerns as well, the students make it a point to bring up their questions in class.

Given that the United States as a nation is characterized by low power distance, weak uncertainty avoidance, individualism and high masculinity, for students to ask questions was natural and expected.

Cultural Cognizance: Philippines

The Filipinos were cognizant of their culture as well as of Western culture. Culture was openly discussed. Discussion focused on "us" and "them." Cultural cognizance seems to be a more appropriate term than cultural awareness. Merriam-Webster Online Dictionary defines being *cognizant* as being "knowledgeable of something especially through personal experience". It implies having special or certain knowledge as from firsthand sources. On the other hand, to be *aware* means "having or showing realization, perception, or knowledge". It implies vigilance in observing or alertness in drawing inferences from what one experiences. *Cognizant* and *aware* are listed as synonyms, but I believe that the word *cognizant* captures the meaning I wish to put forward more eloquently. Another word that comes to mind is *conscious* which implies that one is focusing one's attention on something or is even preoccupied by it. The Filipino group seemed to be both cognizant and conscious of culture. They were cognizant of their culture and were also conscious of Western, specifically American, culture. When asked about observed behaviors such as silence and the need for the teacher to be present in the classroom, both the students and the professor attributed the behaviors to culture. During class, the role of culture in education was a major issue discussed. There were several "us" versus "them" statements in both the professor's and the students' discourse, which was something that was not observed in the American group. Statements such as "our culture" and "the Filipino culture" were mentioned

nonchalantly during discussions. An example was when the professor pointed out the need for local instructional materials, citing culture as a reason for this. Dr. P said, "I was telling the Dean, I wish we have materials that truly document the learning episodes of students while using the computer, documents I can show in class. So we can discuss do's and don'ts, things like that. But we don't have any. Even if we go and try to observe classes, there are not many classes that are making use of computers. So it's difficult to say when and when not to use it. That's my dilemma." I asked, "We don't have any materials?" She replied, "[We have materials] based in America, but then there's the problem of culture. Because the culture there is different from the culture here. Although the principles are the same, the context is different."

The students referred to cultural differences between the Philippines and the West. At one point during the focus group discussion, the group compared Filipino culture with American culture.

Carla: We are not typically like others who are...

Pam: Very vocal, yes.

Carla: Whether negative or positive, they will really air out their feelings. We lack that.

These examples demonstrated the Filipino group's consciousness of culture – both native and foreign. Ganon (2001) termed this *cultural sophistication* (p. 7). He wrote:

> Americans are at a particular disadvantage in trying to understand the mind-sets of other cultures because, at least until recently, they did not travel abroad in great numbers. Even today, American travelers follow a frantic schedule, sometimes

> visiting Hong Kong, Thailand, Japan, and Taiwan within the space of 2 weeks. To expect these American travelers to understand these cultures in such a short period of time is unrealistic. Even fewer Americans spend any time residing in foreign countries, and when doing so, they tend to isolate themselves in their 'golden ghettoes.' By contrast, Europeans speak two or more languages, including English, and they experience great cultural diversity simply by traveling a few hundred miles from one country to another. Many Asians, because of their knowledge of the English language and education in Europe and the United States, are similar to these Europeans in terms of cultural sophistication. (p. 7)

Add to this the fact that American movies, songs, television programs, and other media which present American culture are distributed in huge numbers worldwide. All over the world, people are bombarded with such whereas Americans are not as interested nor do they have as much access to foreign media from which they can gain insights of other cultures.

Is it simply the knowledge of the English language and their education that make the Filipinos cognizant of their culture? Not completely. I believe there are deeper reasons for this cultural sophistication. Cultural cognizance is important to the Filipino group. It is so important that the professor even had to discuss it in class, a topic that was not taken at all in the US technology class. In one lecture, Dr. P asked, "Our first question is what indeed is the culture of the Filipinos? Is that [concept] clear with you, the Filipino culture? Who are you? Who am I? Who is the Filipino?"

Who is the Filipino? What is the Filipino culture? With the onset of globalization, the issue of identity is as serious to Filipinos as it is with all other minority

cultures in the global society. As I have discussed in Chapter 2, there are two major reasons for the need of Filipinos to define its national identity. These are American hegemony, which dates back several decades in Philippine history, and present-day diaspora. The Philippine "identity problem" is often blamed on its long history of being colonized and the way this history is presented to the Filipino people. For example, since first grade, Filipino social studies teachers aim to develop the students' "appreciation" of foreign influence. Typically, history textbooks begin by enumerating the first groups of people who lived in the Philippines. Then foreign influences such as Christianity, music, games and other cultural matters are discussed with emphasis on being "grateful" for having these brought into the country, as if they are gifts. Hedman and Sidel (2000) had this to say on the content of Filipino history textbooks:

> But the real lesson of this textbook is one of absence, the absence of origins, the revealed 'pre-historic' emptiness of the Philippine archipelago, the notable absence of a pre-colonial, indigenous civilisation as the basis for what is presented as an inherently problematic 'Filipino identity'. To be Filipino is not good enough', concludes anthropologist Niels Mulder. "He stands naked and in need of being dressed in foreign gear. Even for qualities that he most certainly had before alleged or actual culture contact took place, he must feel dependent, indebted, and grateful to others. To the Chinese for close family ties, to the Hindus for being superstitious, to the Spaniards for Christian virtues, and to the Americans for learning how to take care of his own affairs. Everybody brought things to the Philippines and nobody is apparently interested in the idea that the pre-Spanish Filipinos sailed the South China Sea in all directions, trading with the

> Moluccas, Malacca, Champa, and southern China, and that they might have discovered and developed things for and by themselves. (pp. 141 – 142)

Mendoza (2002), a Filipino political science scholar, shared the same sentiment. She stated, “From this unidirectional tracing of influence came the unstated implication that everything Filipino is, hence ‘borrowed’, ‘unoriginal’ and always coming from elsewhere. Such portrayal of Philippine prehistoric culture and civilization was deemed as one more baseless interpretation that needed countering, all the more so because [they are] presented in old textbooks as fact.” Mendoza emphasized that an alternative presentation is needed. Filipino culture as presented in history textbooks is not a lesson on gratitude or appreciation. It is a lesson on self-depreciation. This is an error that needs to be rectified. And this is being addressed by Filipino scholars who are involved in the Philippine indigenization movement.

The second impetus for defining national identity is Philippine diaspora. There are many diasporic communities all over the world and one can easily find books on Chinese diaspora, Indian diaspora and others. The Philippine diaspora refers to the massive migration of Filipinos around the world largely due to economic reasons. The large number of Filipino overseas workers have been commented upon, and it is public knowledge in the Philippines that the country’s largest export is human services. In the United States, Posadas speculated in 1999 that “the US census taken in the year 2000 will likely count more than two million persons of Filipino heritage, and some analysts expect that Filipino Americans will overtake Chinese Americans as the nation’s largest Asian American group.” The US Census of 2000 did show that there are 2.36 million persons of Filipino heritage, but the Chinese American population is still the largest Asian group at

2.73 million. These Filipinos continue their Philippine ties, often remitting dollars back to the Philippines. Posadas (1999) wrote, “For many foreign-born Filipinos, making it in America means sharing it with those left behind” (p. 141). Ben-Rafael & Sternber (2001) wrote that diasporic communities in Western societies may remain involved in networks of varying amplitude across borders and continents.

Filipinos or citizens of Filipino descent (e.g. Filipino-Americans) in diasporic communities, being so far away from “home” do nourish their ties with other Filipinos. They visit the Philippines as often as possible, maintain communication lines open with relatives, and continue to practice Filipino customs and traditions. To assuage homesickness, the Filipinos abroad try to recreate an atmosphere of “home” in their host countries. And in this process of recreation, the task of defining what is truly Filipino naturally occurs. Hedman & Sidel (2000) calls this ‘long-distance nationalism’ (p160).

However, this task of defining a national identity is not easy. There is so much diversity in Philippine society that this whole activity becomes somewhat complex. Studying the Filipino nation, it seems that it is both “cleft” and “torn”. According to Hungtington (1996), a cleft nation is one whose ethnic groups are so different culturally that they have difficulty integrating into a common national culture. This definition clearly applies to Malaysia, Nigeria, and Belgium. The Philippines is indeed composed of several ethnic groups who are very different from each other. In fact, at present, there are two autonomous regions in the Philippines. The first group is the Cordillera Autonomous Region (CAR) whose tribal people’s beliefs and relationship to nature are somewhat similar to American Indians. The second group is the Autonomous Region in

Muslim Mindanao (ARMM) whose people are fighting for their voice to be heard in this predominantly Christian country.

A torn nation, on the other hand, is one that has been "ripped from its cultural roots at least once, in the sense that many of the basic cultural values guiding it have been destroyed." (Huntington, 1996). Both Russia and Mexico fall into this category. Huntington (1996) predicted that leaders of torn countries "typically wish to pursue a band-wagoning strategy and to make their countries members of the West, but the history, culture and traditions of their countries are non-Western." This rings true for the Philippines. The first time that the Philippines has been ripped from its cultural roots would be during the Spanish colonialization. Contrary to how the Spaniards judged the pagan culture they found when they arrived in the 1500's, the natives were neither illiterate nor uncivilized. There was a syllabic system of writing, a form of government that was working, as well as active commercial relations with neighboring countries. However, still reeling from 350 years of Spanish racism, the American's came imposing their western culture. What Huntington predicted about leaders wanting to join the West while the rest of the country remain largely non-Western is happening in the Philippines and this is contributing to what Filipino scholars call, "The Great Cultural Divide." Magay (1994, as cited by Mendoza, 2002) explained that:

> This sharp disjunction in sensibility has on top a thin layer of culture brokers known as the 'ladino' class, often co-identical with the economic and political elite but also including middle class intellectuals and technocrats sufficiently educated and domesticated into the formal system of power introduced into the country by its colonial past. The vast bottom half consists of that supposedly

> silent and inert mass whose universe of discourse is limited to the indigenous languages and whose subterranean consciousness has remained impervious to colonial influence. (p. 76)

This "Great Cultural Divide" also contributes to the Philippine language situation problem. As Mendoza (2002) pointed out, there's a division between the English-speaking elite and the Filipino-speaking *masa*. The educated elite are themselves divided into fundamentalists and postmodernists. In some way, this runs parallel to Ben-Rafael & Sternberg's (2001) contention that globalization "blurs the contours of collectives and awakes two opposed reactions: fundamentalism and cultural hybridization" (p. 14). The Indigenization Movement, being concerned with what's essentially Filipino, are fundamentalists. The postmodernists, however, with their concern of defining what is Filipino based on what can be currently observed denote cultural hybridization.

The indigenists and the postmodernists both have a place in the Filipino's quest for national identity. Though they are coming from opposite poles, the goal is the same: to define Filipino cultural identity. In this endeavor, what is essentially Filipino is just as important to study as the Filipino's present-day lived experiences. Both are needed to answer the questions: Who are we? Who have we become? This is a huge dilemma which provides an impetus for professors like Dr. P to discuss this issue in their classrooms as they educate the nation's teachers.

Cultural Cognizance: United States

In the US classroom, the issue of culture was not mentioned in class or during interviews. Why was this so? There are three possible reasons. First, the United States of America, although culturally pluralistic, has a common dominant culture. This

dominant culture dictate the "rules of the game" in American society. While minority cultures keep their own customs and traditions in the privacy of their groups, once they are out in public, they join in and go along with the dominant group. There are issues arising from this situation as there is an increasing demand by minority cultures for their voices to be heard and their cultures affirmed. On the other side of the scale, there are the likes of Huntington who are fighting to maintain the status quo. There is a growing concern for defining American identity, as can be seen by recent books that are being published today. One example is Huntington's "Who Are We? The Challenges to America's Identity." Although these issues are being discussed in current literature, however, there is a general acceptance for the dominant culture.

Second, being the sole world power, the United States need not contend with Western hegemony. In the global arena, it is the American culture that is dominant. It is the other cultures that need to adjust to the American way of conducting business, not the other way around.

Third, with Americans attaching importance to specialization, we can expect that the topic of culture will be discussed in a course on culture, not a course on web programming. It does not mean that culture is not considered an important issue by the Americans. However, this technology course is not the proper venue for the discussion of this issue. In fact, even the topic of using the Internet was not discussed in this course. During the focus group interview, when one student said, "I don't think that he's really directly addressed the issue of using the Internet, you know, instructionally," another replied, "I don't think it's his job in this course." A third student explained, "And also,

there's [another professor], [she'll] deal with that issue a little bit more because we're talking about content and we're talking about the delivery of that content [in her course]."

In other words, since this was a course on creating static web pages, the class focused on accomplishing just that. This can be expected from a nation where specialization is valued.

Technology Issues Discussed in Class: United States

A predominant theme in the professor's discourse was the power of technology. It seemed as if he was selling this idea to his students. During his lectures, students did get the professor's message on the power of technology. When Dr. U talked about technology, the message he conveyed was that of technology being a powerful tool. According to his students, he did not come right out and said it, but that is the message they got. Courtney said, "He's on the Internet all the time …And his whole life is based around that. And so that will tend to lead me to believe that he has a strong belief in the advantages of, uses of technology." To which Dianne agreed, "Yeah, I think what he's taught in that regard has been ... I think what he conveys to you is his belief in the power of technology even though he doesn't talk about it explicitly, you know. And I think, I had, gets this into your bloodstream after a while."

Dr. U certainly believed in the power of technology. He mentioned this during my interview with him. "This is not a passing fad. It's not a passing fad because it is such a powerful learning tool - that's demonstrated. And because it's running it's way through the community. It's an interactive environment."

How did Dr. U convey the message regarding the power of technology? During his lectures, Dr. U used words like *important, nice,* and *cool*. During a lecture, he said, "I

want to show you AOL Instant Messenger and how to load that, hot to bring that up, how to apply for an account, how to do all kinds of stuff. It's really, really *important* that you become familiar with some kind of messaging tool. I (like) AOL Instant Messenger. I don't think it's necessarily the best one for all purposes. The really popular products are Yahoo Messenger, AOL Instant Messenger, and ICQ. Those are the three that are most common. Now the *nice* things about both AOL Instant Messenger and Yahoo Messenger -- one is that you can push files back and forth. Really a *cool* tool. ...The second feature of AOL instant messenger, and actually it's been in Yahoo Messenger for a while, really, really *nice* -- they have audio. You can do a peer-to-peer AOL. So it's essentially an audio phone, free of charge." Dr. U then discussed how something as seemingly simple as the instant messenger on the Internet had seriously affected telephone companies and the price of phone calls. In a way, he was pointing out that the Internet was, or will be, as ubiquitous and essential as telephones.

In another instance, Dr. U encouraged students to invest in broadband connections. He said, "I really can't encourage you to do it enough. The time has come. The price is dropping. Busy signals are getting worse and worse and worse. Uh, and I, I strongly encourage you, if you're gonna get into this business, you're gonna be doing some things with technology, invest the money in broadband connections." An implication of this message was that the Internet was useful and significant enough to warrant an investment.

Other words that Dr. U used are *great*, *interesting* and *attractive*. In another lecture, he said, "One of the big features of the web, one of the *great* features of the web is the ability to get away from text based formats and to go to full graphics, mixed kinds

of formats. There are two really nice features to that. Number 1, pictures are just much more expressive in many cases. But also the graphic capability allows you to convey information in a much more *interesting* way."

Dr. U also conveyed an implicit message of programming as an adventure – a puzzle to figure out or an idea to explore. "Go ahead and try it. We can try it. And what I want you to do is to start asking these kinds of questions. (Silence while typing.) Save it. Anybody have any *predictions* as to what it will do?" Many times, after trying out an idea, students have responded with "Oh! That's good!" Or "Wow! That's nice!"

Dr. U also used words like *steal* and *lazy*, adding a mischievous tone to the act of programming. For example, he once asked, "Everybody know how to *steal* a graphic?" Another time he commented, "Okay, now, I don't want to keep typing again all those p's, so what I'm gonna do is I'll just, what I call this a *lazy* programmer. I want everybody here to be a lazy programmer. So what I'm gonna do I'm gonna swipe over that, I'm gonna copy, and I'm gonna paste. And I'm gonna paste. I'm gonna paste. There, that's a lot of them." Later on, however, Dr. U did explain that copying and pasting, as well as creating templates, help avoid typographical errors. He also explained that copying codes was encouraged in the web. In this way, it was not actually stealing as he had said so. However, using words like *steal* and *lazy* denoted a feeling of getting away with something therefore promoting a sense of adventure.

The most important message was on how technology can be used as a powerful tool in teaching. During the last day of classes when the students were presenting their projects, Dr. U pointed out the benefits of the websites the students have created, "That's really good. I mean, this kind of things, this is a great way, this is really a great way for

teachers to use the Net is to begin, ah, finding these sites, cataloging them in some way that makes it easy for the students to find. Thank you. That's really nice."

As the examples presented have shown, with words like *great*, *cool*, *interesting*, *attractive*, *nice*, *steal*, *lazy*, and *mouse amateur*, Dr. U conveyed a message of technology, especially of the Internet, as powerful, important, and fun. He made it a point to spell out how useful the Internet can be and showed his students the various things they can do in the Internet. This was an important message since, as Hofstede said, low power distance nations have more modest expectations of the benefits of technology. In addition to this, the US is also characterized by weak uncertainty avoidance. Nations that are weak in uncertainty avoidance tend to have skepticism towards technological solutions. That's probably one reason why, during the interview, Dr. U pointed out that this was not a passing fad.

Dr. U did not only emphasize the significance of using the Internet, he also emphasized the fun part of it. With words like *cool*, *predict*, and *steal*, he made it seem like an adventure. In the interview, one of the instructional objectives he mentioned was that of showing his students how intellectually challenging and fun programming can be. "I want my students to have fun." This made sense, since, if we recall Gannon's statement, having fun is something Americans can be seriously committed to. For Americans, having fun is also an important component in learning. Being entertained was in fact one of the things that the students mentioned during the focus group discussion. One of the students talked about not minding going to class because Dr. U is so entertaining, to which the group agreed.

In the US classroom, prices and quality of software programs, hardware, and Internet access were often included in the discussion. Once they discussed how much a software program for creating and editing graphics cost. They also compared places where they might be able to get the product at a lower price. Since the type of Internet connection affects productivity while creating websites, the prices of broadband connection was discussed several times. Let me illustrate with the following excerpt:

Student 1: What is the price of the ADSL through UC? Is it $120?

Dr U: Uhm, the price for ADSL through UC? There's a webpage you can go to. Let's see if I can find it real quick. (Types on computer.) Uhm. It is, uhm, $34.95.

Student 2: At [name of company] it's a hundred dollars.

Dr. U: That's just kind of expensive. If that's the case, I wouldn't go. I would go to Roadrunner.

Dr. U also informed the class of programs they can explore which can be downloaded free of charge. Where to invest money is openly discussed, such as when he said, "I strongly encourage you, if you're gonna get into this business, you're gonna be doing some things with technology, invest the money in broadband connections. Like Zoomtown now is $25 a month, Roadrunner is what? $29? Or they may go up to $39, I don't know."

During the focus group interview, a student acknowledged Dr. U's influence on their decisions to purchase or not to purchase software and other related products. John mentioned that "There are some other endorsements, well, I guess not really endorsements, but pluses for software and negatives for software. He's constantly

complaining about Microsoft in particular and all its package, in most cases, Word. But he also praises Paintshop Pro. So his prejudices or whatever they are, relationships with those software packages does influence us students to make purchases."

Price was openly discussed as well as the topic of budget. These were realities and practical issues that needed to be addressed when integrating technology in education. During the interview with the professor, he cited lack of money and failing to see computers as recurring budget items as two of the things that are hindering the successful integration of computers in education.

Although Hofstede included a discussion on money, he did not discuss the reasons why people of certain nations can discuss prices so openly while such a discussion is almost taboo for people from other nations (e.g. the Philippines). This openness to discussing money matters can be explained using Fiske's theory. According to Fiske, the United States is a Market Pricing nation. As mentioned earlier, in a Market Pricing relationship people denominate value in a single universal metric, typically price (or "utility"), by which they can compare any two persons or associated commodities as qualitatively alike or unalike. Using Fiske's theory, we can expect that for Americans, it is but natural to include an evaluation of commodities during class discussions, which may include the comparison of prices and market offerings. However, using this theory does not sufficiently explain why a discussion of prices is not so easily done in other nations. This is an interesting finding on cultural differences which may be explored with further research.

Technology Issues Discussed in Class: Philippines

When it came to integrating technology in education, the Filipino professor assumed a cautious stance. Unlike her US counterpart, Dr. P did not talk so much about the power of technology. There is no need to since the professor and students completely agreed on the importance of studying technology. One of the students, Belen, believed strongly that "We should not ... contradict what's here already." Carla, another student, was convinced of the need for studying technology. She explained, "We're now in the technology era, aren't we? So if you don't take courses in technology or anything about the computer, you'll be left behind. I mean, you'll just be sitting there in one corner, utterly useless."

There are two plausible explanations for this observation if we were to use Hofstede's cultural dimensions. First, high power distance groups have high expectations on the benefits of technology. Second, collectivist groups treat technology as magic. The ingenious Filipino places a lot of value on innovation. The younger generations of Filipinos are largely technophillic with the latest technological breakthroughs quickly turning into fads. Take for example the case of cellular phones. According to a news report by Vanzi (2003), roughly one-fourth of Filipinos will own at least one cellular phone. This will probably amount to about 20 million subscribers. Filipinos are so adept at sending text messages that they have the ability to type in messages without looking at the keys -- at amazing speeds!

So instead of having to convince students of the power of technology, Dr. P threw caution in its use. She emphasized the need "to know when and how to use it." She also encouraged her students to come up with their own ideas that will serve their own purpose. During her first lecture, she emphasized this by saying, "Now, about the

criteria, don't just copy from wherever. I want something that originated from you. As a teacher, what will you look for in a website? Okay? What I want is for you to have your own viewpoint about the criteria that you can use in choosing a website. Verbalize that. And then maybe we can put them all together and we can come up with a very good evaluation instrument based on your work. Okay? It's better when we are involved in the process of creating ideas ourselves because those experts that you read in books? They just created their own instruments. They developed them for their own purpose. Now, here [in the Philippines], I want something that comes from within. As much as possible, we should not copy from them. And then later on, maybe, we can compare our work against theirs."

In the context of overzealousness towards technology, such a warning and call for originality may have been necessary. Let me share the story of faculty scholars studying abroad. Upon their return, Covar (cited by Mendoza, 2002) notes that in the 1950's, when Filipino social scientists became involved in village community studies designed to aid community development, they began to re-examine the Western concepts and models they have imbibed. More often than not, these did not fit local conditions. Since then, Filipino nationalist scholars have been hard at work in creating knowledge that is significant to Philippine society. One reason why Western ideas such as imported economic theories are largely irrelevant is because they are unable to deal with collective and particularist interests characteristic of collectivist cultures (Hofstede, 2001). University professors take it upon themselves to develop their students' critical thinking. Dr. P's act of cautioning students to approach the process of adopting foreign ideas with a

grain of salt, therefore, not only applies to the field of technology but also in other fields. She pointed out the importance of considering the local context.

In the Filipino classroom, language was a major issue discussed in instructional design. In one of her lectures on designing instructional programs, Dr. P brought up the issue of language. “One major issue which should be settled then is - which is the language to use? English or Filipino? ... I think it is a very big education issue in which the Department of Education could not find the [right answer] it’s trying to find. A long time ago they had, they had the, what you call, policy, policy to use either English or Filipino. But there’s a restriction. If you try to use English, all throughout, you [should] use English. If you use Filipino, you [should] use Filipino all throughout. But if we were to listen to ordinary conversation, it’s weird. In the normal situation, do you follow that rule?” Here, Dr. P was speaking about the fact that the conversational language is neither Filipino nor English, but Taglish – a combination of both languages. She continued, “This is a language thing, right? Even in one sentence, it’s all mixed up. One begins in English then ends in Tagalog, I mean, Filipino. So it’s really difficult to implement this policy. This is one issue that I want to clarify with you because language is part of our culture. And it is the expression of our culture.”

Language is indeed a major issue in Philippine Education. It is an issue that is constantly being debated over the past few decades. The main reason for this debate is that, when it comes to choosing one national medium of instruction, there are several options to choose from: the various Philippine languages, English and the emerging hybrid language, *Taglish*.

As McFarland (2004) stated, “the Philippines is a country rich in languages, more than 100 distinct languages.” The Ethnologue 2002 listed 169. McFarland (2004) gave two causes for this diversity: geography and linguistic innovation. He said that languages change because it is impossible for them to remain static. He explained that a single individual possesses speech habits termed an *idiolect*. People who live together will eventually possess in common a large set of shared idiolects, though there are minor individual differences. These speech habits constitute a speech variety. McFarland emphasized the fact that language is so vast that no one ever learns his language completely. As individuals interact with each other, we are constantly guessing the right thing to say. In this guessing, we sometimes use a word in a way it has not been used before, or introduce a new word. This is called a *linguistic innovation*. When others copy this innovation and it spreads, this innovation then becomes an established part of the speech variety of the community. Since many Philippine communities are isolated from each other due to geography, a great diversity of languages was developed.

At present, McFarland (2004) noted that the people of the Philippines are experiencing a period of language convergence, marked by high levels of borrowing from large languages such as English, Tagalog as well as from regionally important languages. This was brought about by globalization and the Filipinos’ increasing contact with each other. In order to communicate, speakers often switched between two languages as well as borrowed words from one language to another. Borrowing tends to be one-sided. Words were usually borrowed from a dominant language into a subordinate one. McFarland (2004) said that this is just a matter of numbers: more people are speaking the dominant language and so it becomes a necessity for the minority group to learn the

dominant language. He said that a language is dominant because its speakers have power-economic, political, social religious, etc. Speakers of subordinate languages want a share of that power e.g. through employment. According to McFarland, convergence that is taking place moves in the direction of the dominant language rather than toward some middle ground. At the worldwide level this movement is towards English; while in the Philippines, the movement is towards Tagalog and towards other regionally dominant languages. This presents one dilemma among the Filipinos today. A choice has to be made between enriching linguistic diversity (and maintaining the various languages which is a cultural heritage) and unifying people through one national language (wherein minority languages may die out). In the natural scheme of things, however, there seems to be no choice. The convergence that McFarland reported is a natural consequence of an inevitable social change.

Not only is there a Filipino language situation, there is also a dilemma in the English language situation in the Philippines. Calata (2002) reported that the English language was introduced as the language of instruction when the Americans opened the first primary schools in the Philippines. These early American teachers were called the *Thomasites* after the ship that brought them in 1901. Enthusiastically striving to promote democratic values, these first large numbers of teachers came from all over the United States and represented such institutions of higher education as the University of California, University of Michigan, Indiana University, University of Chicago, University of Kansas, Harvard, Cornell, Stanford, Yale, Georgetown, Purdue, Colby, Dartmouth, and Nebraska (Calata, 2002). Enrollment in the new primary schools soared

from 150,000 in 1900 to more than 1 million in 1921. This was the beginning of the country-wide use of English as medium of instruction which continues until this day.

Now there is a split between users of Filipino and English which McFarland (2004) noted. He said that the Philippines is split into two language spheres: the Tagalog-speaking *masa* and the English-speaking elite. This split into language spheres, which is a reflection of a split into a dual economy and a dual society is part of the "Great Cultural Divide" problem which must be addressed. As McFarland had concluded - it is primarily a social problem, not a linguistic one.

Given this duality in society, the Philippine Department of Education finds itself walking a tight rope between the two languages. The pendulum swings between having English as the medium of instruction and Filipino as medium of instruction. The nationalists call for the use of Filipino as medium of instruction since this will allow more people, especially from the *masa*, to participate in nation building. Yet parents still prefer the use of English. In a 1968 survey cited by Salazar in 1997 (Mendoza, 2002), parents preferred English in order for their children to be more proficient in conversation, to show that one is an educated person, to get a better job, to be able to travel, learn more easily, and to maintain dignity and self-respect. Though a more recent survey has to be done, in my three years experience as a former school administrator, parents still hold these opinions. In fact, even at the preschool level, the most cited reason for enrolling very young children to school was for them "to learn English." Dr. P, in her lecture, also mentioned this sentiment. She said, "It has been part of our mentality that a teacher or a student or anybody who can speak English very well is intelligent. So we equate intelligence with the ability to speak a language, particularly English." I must mention

that the Philippines does have a bilingual policy. However, the debate still exists with regards to which language to teach subjects such as Mathematics and Science; which language to use the most of; and in which language students should learn to read first.

So this is a really big issue in the Philippines: which language should be used when designing instructional programs using technology? There are several choices: the various first languages; Tagalog or Filipino; English which is also divided into two forms (*masa* and elite); and if I may add, Taglish which is the conversational language Dr. P has mentioned in her lecture. In what language should students learn? Using language other than the mother tongue places a lot of cognitive barriers that students need to hurdle. This is indeed a dilemma. In this plethora of languages, where is the bull's eye?

In the US classroom, no language issue was mentioned nor discussed. Monolingual America has no problems regarding which language to use. Being the dominant world culture, Americans do not have other languages to contend with either. Let me add, as I have mentioned earlier, since Americans attach importance to specialization, we can expect that the topic of language will be discussed in a course on language, multicultural education, or courses on integrating diversity, not during a course on web programming.

It should be pointed out, though, that both the US professor and a student, during individual interviews, pointed out the importance of learning the language of HTML. Ben stated during the interview, "Well, I feel that if I'm going to put my focus on technology and things are moving at such a rapid rate, I had better know how to create a web page on my own. At least, know the lingo of HTML. Even if I'm not an expert. I

have students I'm sure who can far surpass me. But at least if I know the language, I could communicate with them."

Dr. U also pointed out the importance of learning the HTML as a language. During the interview, he stated, "You learn to write computer programs by writing computer programs. It's just as important in HTML as it is in any other programming language." During the first class observation, he began his presentation of the day's lesson by saying, "What we're going to do now is we're gonna start talking all about the language of the web." He then proceeded to define, in context, terms such as hot areas, static, dynamic and web editor. In the American case, therefore, unlike in the Philippine case, the language issue isn't on which language to use. Rather, the important thing is to learn the language of the web itself.

Views on Technology: United States and the Philippines

Both groups showed similar views and concerns in terms of the role and use of technology in society and in education. When it came to the integration of technology in teacher education, a convergence of views and concerns was observed between the two cases. Both groups agreed that computers were a powerful tool for learning and that teachers needed to develop a certain degree of expertise in order to maximize the use of computers. Both groups also voiced similar experiences and problems in integrating technology in schools. These findings were reflective of what current literature was saying regarding the integration of technology in education.

Both groups agreed that computers were a powerful tool for learning. Dr. U, the American professor, captured the whole idea with this statement: "Knowledge involves problem solving, thinking, cogitating about particular issues. That's all involved in that.

The tools to do that are information-based tools. And the Internet is the best information tool ever invented.' Both groups accepted the notion that technology changes the traditional way of teaching. As the Filipino student, Allan, stated during an interview, "When we discussed the importance of computers, how effectively it can be used in instruction, I remember her [the professor] saying that computers can change traditional classroom teaching. It can be used to change a lot of things to improve learning."

An example cited was that of computers being effectively used to generate excitement and catch students' interest. Dave, a US student, gave an example. "Because of how visual HTML is and how they can upload a website and see it immediately and maybe download it and maybe surf it at home, on their own computers, there's immediate gratification." Allan, a Filipino student, said that "Computers are a big help in teaching. In computers, there's a lot of graphics. There're a lot of things you can do that you can't do with other materials. That can catch students' interest. And also, at present, there are so many technologies kids use to entertain themselves. ... So maybe we need to catch the students' interests so their attention won't all go to video games... Like now, I give them a lot of websites so they'd be interested. Activities they can do at home which they might find entertaining while at the same time they are learning."

Dr. U explained how computers can bring forth education beyond the four walls of the classroom. "If we look at the way education is doing, more and more education will be in a distance learning environment. And I define distance learning as any learning that takes place outside the four walls of the classroom. And the Internet is gonna play a very prominent role in that. We've seen up 'til now the role the library has played this

kind of activity. It pales. Substantially pales compared to what we're gonna see the Internet provide, what we're seeing the Internet provide now."

Both groups stated that technology was here to stay; that it was already being used at home and at work; and that teachers need to teach students how to use it. Cathy, an American student, put it in a nutshell with this statement: "Yes. It's part of the work world. It's part of everyday life. Children are using it. Teachers need to be educated on how to help children learn from it."

Debbie, an American student expressed some fear. During an informal interview, she mentioned that she likes instructional technology. However, she is somewhat anxious due to the constant change. "Scary, really," that's what she said. "[But] the Internet is there to stay so it's worth learning."

Belen, a Filipino student, expressed a similar view: "We should not contradict what's here already. Like, I have co-teachers who do not really want to learn how to use the computer. But it's there already. You really cannot stop it. ... So I say, let's embrace this technology that is already here."

Given this potential, the students in both groups were in sync with the need to increase their own expertise. Pam, for example, planned on studying web programming more extensively after taking this course. She explained, "Of course, if you want to use it, you should become an expert."

Both groups had similar problems in integrating technology. The professors and students in both groups expressed their disappointment in the way technology was being integrated in schools so far. As Dr. P stated in the interview, "What's happening now is that society is ahead of the class. Society is ahead of the school. So, aren't there two

kinds of philosophy? Education as a change agent or education to suit the needs of society? The thing that's happening now, education is ... not a change agent. Changes happen in society, education will just follow. So there's really a huge gap. At this time, those who are outside are more technologically advanced than those who are inside the College of Education. It's like that."

That computers were being used more widely outside as compared to inside the classroom was well documented in recent literature. Bewick and Kostelnik (2004) claimed that there is strong evidence that many teachers basically ignore the computers in their classrooms or use them only in a limited fashion. Cuban (2001) referred to computers in classrooms as "oversold and underused." In his study of Stanford University classrooms (of various levels from preschool to university), one of Cuban's unexpected findings was that less than 10 percent of teachers who used computers in their classrooms were serious users (defined as using computers in class at least once a week); between 20-30 percent were occasional to rare users (once a month); well over half of the teachers were non-users. Allie, one of the US students I have interviewed, shared a similar experience in the school where she's teaching. "In my school there's -- I mean, there's very few teachers who even use their computer regularly in class. Maybe outside of class for a personal thing or maybe two, to keep track of things. But they don't use it as a tool in class. There's only, like, it's a very small school, but I'd say, less than ten percent of the teachers use the computers as a tool in the classroom. And I think that's kind of scary."

The three problems both groups cited in integrating technology are: teachers' fears, teachers' lack of training, and lack of administrative support. These were similar to

a list of key issues and challenges that Wallace and Hakes (1999) cited. Teacher Education Initiative partnership institutions, they said, are wrestling with issues of access, funding, support, training and institutional culture (p. 120).

Fear of technology was one common issue. Pam talked about the fears of teachers in her school, "Sometimes, the more senior teachers are hesitant to use the computer. They're afraid that the computers will take their place and they will lose their jobs. Yes, and it seems they really are afraid of using the computers."

It was also not so easy for teachers to embrace the technology that was available. Dr. P explained, "In my opinion, if you're an old teacher with your own way of doing things, it's difficult to make a change. Perhaps they would also like to, but it's hard. They need to study again." We have to remember that many present-day teachers did not have computers in the classroom when they themselves were students. They did not experience how to learn with it as they did with blackboards and books. Integrating technology also calls for a change in pedagogical philosophy, which I will discuss later.

To study again, the teachers will have to undergo workshops and in-service training, which, at the moment, were not that effective either. Dr. U pointed out the ineffectiveness of the trainings that were presently available based on his own experience of giving such workshops. "Typically they're given one day in-service. Usually between semester breaks, most of the people sitting in the audience have done this. They're not listening to me. They're filling out their grades, so to speak. They don't really have a feel for it.... They don't have adequate in-service. And teachers, because they're so busy, they barely survive all the class planning for the next day, grading papers and things like that. They don't really have time to sit and decompress like we do here at the university

and think of the optimal ways of using this technology. Teachers need that kind of opportunity."

Unfortunately, some teachers don't even get to the point of attending one-day trainings. Allan expressed a certain degree of exasperation when he mentioned that, "Actually, the principal have been trying for years [to integrate technology]. She's been trying to impose computerized grading. So far, until now, the principal is still attempting to hold a whole day session workshop for computerizing grades and the like. So far, until now, the 'seasoned' teachers are still refusing this idea."

Not all principals and administrators were like the one in Allan's school. Many other administrators were not as supportive of technology. The third problem in integrating technology that was mentioned was lack of administrative support. Some administrators were not convinced of the computer's significance in learning. When this happens, they will not support teachers' initiatives. According to Dr. P, "There are teachers who are willing to undergo training. However, when they return to their classroom, there are so many resource limitations. That includes the administration. That's a perennial problem. ... If the head teacher or the principal isn't sold in the idea of technology, whatever training the teacher got, when she returns, she'd still be using the old methods."

Funding was another administrative issue that was mentioned. Dr. U stated in the interview, "I think there's a perception also among school administrators who don't fully understand all the technology that once they bought it, they've bought it and now they can move on to something else. What they don't realize is what they have here is essentially a disposable machine. About every three or four years, you should replace

your machine because new features, new technologies come out that you want to take advantage of. They have to realize that this is a recurring budget item." Belen, a Filipino student, expressed a similar view: "The school itself should have technology in mind for the coming years. When you say computers, they think it's just an expense. They should realize that this is necessary in preparation for the future, since it's now really a computer world already, isn't it? The school itself [should realize this]. And when the school realizes that they really need this, it will follow that the administrators and teachers should also be able to utilize the computer in class."

In summary, when it came to the role and use of technology in society and in education, both groups showed similar views and concerns. Both groups accepted that technology indeed provides a powerful tool for teaching and learning. Both groups agreed that this power should be harnessed through teacher training. In both countries, problems integrating technology included teacher's technophilia, lack of teacher training, and insufficient administrative support.

Pedagogical Approach: United States and the Philippines

Both groups used constructivism for teaching and learning technology.

In the teaching of technology, both professors applied constructivism. Constructivism has several tenets and principles. For the purpose of our discussion, I shall limit the discussion on three areas: the role of students, the role of teachers, and the creation and recreation of knowledge. I will describe my observations from our two case studies on these three points.

The Role of Students

Constructivism generally casts learners in an active role. Constructivists believe that learners control their learning. According to Brooks & Brooks (1999), as educators, we develop classroom practices and negotiate the curriculum to enhance the likelihood of student learning. But controlling what students learn is virtually impossible. Students often take different routes in their quest for reaching understanding. Constructivists have turned their attention to the learner, arguing correctly that he or she is responsible for their own learning (Sahin, 2003).

During the focus group discussion with the US students, Dianne reluctantly contended that their class is constructivist. "Well, you know what? I hate it when we always get back to people saying, ah, it's constructivist, blah, blah, blah. But yeah! It is that in a way. And also, I think at our level of education ... because we're doctoral students and master students, that we're, and most of us with experience and education, we're pulling out of it the things that we need, we're able to do that constructive, the construction that we need to do." Carla, a Filipino student, also believed that since the course was at the graduate level, students should really be on their own. "Unlike when we're still in college, [now] you have initiative. What should I do? You make your own decisions, you don't rely on the teacher or on others. You're on your own."

The students, both in the US and in the Philippines, did accept their responsibility for their own learning. During the individual interview, Dale explained, "I think that if I take active participation and ask questions, I'm taking a responsibility for my learning."

The Role of Teachers

Constructivist educational practice cannot be realized without the classroom teacher's autonomous, ongoing, professional judgment (Brooks & Brooks, 1999, p. 19).

Brooks and Brooks (1999) identified five central tenets to constructivism. According to them, constructivist teachers value students' points of view, they structure lessons to challenge students' suppositions, they recognize that students must attach relevance to the curriculum, they structure lessons around big ideas, and they assess student learning in the context of daily classroom investigations. In this context, teachers are no longer "sage on stage" but rather a "guide on the side." In a constructivist classroom, the teacher becomes a *coach*, *analyzer*, and *facilitator* of the strategies used in the process of teaching and learning that would lead to empower students in knowledge construction (Chen, 2001).

Dr. P explained at the beginning of the class that theirs will be a constructivist classroom and that her role is more of a facilitator. "This is graduate school. This is our class, not my class." So when the students were presented the syllabus with the course objectives and requirements, Dr. P encouraged them to share what they think of it. "Any questions? Objections? Suggestions? Do you think the output, activities are reasonable enough for you to achieve? Let me know because we're in this together. You have to agree. This is just a tentative plan. If you want to change anything or you want to improve something, just tell me." After that, the students were very much on their own when it came to creating the projects for meeting the requirements. Dr. P as a facilitator allowed the students to work in pairs, brought in resource people, and provided links where students can get additional information that they might find helpful. She was also available for individual consultation, and I observed several students approaching her for clarification and guidance. As the term progressed, Dr. P would sometimes address the class and offer feedback on projects that have been submitted.

Dr. U, on the other hand, having expertise in technology, coached the class through a carefully planned course of learning. Having expert knowledge, he led them step-by-step through the process of creating webpages, scaffolding along the way. He demonstrated problem solving techniques; encouraged the students to ask questions and explore possibilities; and in the end, provided the necessary feedback to help students to evaluate their work. Despite his huge input, students still realize that when it comes to their own projects, they're on their own. As Allie explained, "He's not doing it for you."

The Creation and Recreation of Knowledge

Allie, one of the US students, explained that the class is constructivist "'cause you're pretty much building in class, that's what you're doing. And for me, to build it, that helps me know it."

Holloway (1999) stated that learning in the US classrooms has traditionally involved having students repeat newly presented information in reports or on tests. Constructivist teaching practices, in contrast, help learners internalize, or transform, new information (Brooks & Brooks, 1993, in Holloway, 1999). In the constructivist model, humans construct mental structures that, in turn, organize experiences and make further understanding possible (Muller, Sokol & Overton, 1998, in Holloway, 1999). Deep understanding, not imitative behavior, is the goal of constructivism (Brooks & Brooks, 1993, in Holloway, 1999).

Perkins (1999) explained that constructivists believe that engaging learners in discovery or rediscovery processes energizes them and yields deeper understanding. This seemed to be true for Pam. "You know, we come to class excited to work on our projects. Even if there's no professor around, we're still working on it." This same

enthusiasm was shared by another US student during the focus group discussion. According to Debbie, “Everything I learned here is new! I mean, just from how you put it in, and all the little tags and how it shows up and how you make connections, and ... then ftp and everything, I never even knew what it was.”

In both classes, students were actively involved in the creation and recreation of knowledge using the computer as a tool for learning. In both cases, the students were shown the steps in building web pages. The HTML tags were the same. However, each student created a web site that they could use for their specific classes. The websites they built for themselves, therefore, addressed their individual needs.

In this exploration of knowledge, it is noteworthy to point out that Dr. U used various strategies: problem solving, analogy, and exploration. Since Dr. P engaged students in individual consultations, instances such as these were not documented in the Philippine case.

Problem Solving. A central tenet in constructivism is that learning is an active process and that learning is determined by the complex interplay among learners’ existing knowledge, the social context, and the problem to be solved. (Tam, 2000 in Sahin, 2003). Dr. U often presented problems in class and walked the students through the solution. Here’s an excellent example albeit a long one. However, this example perfectly illustrates the problem solving process so I present it in full.

Dr. U: What if I want two spaces this way, what would I put in?

S: Another p?

Dr. U: Another p. So I’ll go ahead and do this. Like that. And by the way, it doesn't make any difference whether the command is in upper case or

lower case. I'll go ahead and save it, ftp it over, and now what I'll do is I'll reload is and watch what happens. Watch what happens. What happens?

S: Nothing happened.

Dr. U: Maybe I made a mistake in my code. So we'll take a look at it. Tell you what I'm gonna do. Put in a whole bunch more of these p's. It should move things down, right? Okay, now, I don't want to keep typing again all those p's, so what I'm gonna do is I'll just, what I call this a lazy programmer. I want everybody here to be a lazy programmer. So what I'm gonna do I'm gonna swipe over that, I'm gonna copy, and I'm gonna paste. And I'm gonna paste. I'm gonna paste. There, that's a lot of them. That's really a good thing to do. If you want it, you can go on copy and paste under edit, on top of the page is control V? See the control V right here? It's hard to see right here, but copy is control C. Hold the control key down, C and control V. That's the same in all Windows program.

S: You click the right mouse button as well?

Dr U: Yes you can, but that… control C and control V on the keyboard is the same on all Windows program. Also the same on Macintosh. No control key, you don't have control key. You have that * key and the apple key. So now, let's save this. I'm going to save it, copy it over, and reload. And it didn't do anything. And that is an interesting thing to keep in mind. That 1 bracket p adds a good line double space, but 2 don't seem to do anything, 3 don't seem to do anything. All right, let's go back for a minute.

S: (A student suggests something.) What if we put backslash p at the end of the line?

Dr U: Oh, that's an interesting idea.

S1: So maybe what we'll do is we'll put a backslash p at the end of the line.

S2: That's a good idea.

Dr. U: Okay. Let's see what that does. Let's go ahead and save it, and ...Wait, let's let go for just a minute. Maybe I'd like to put in some extra spaces here. Maybe where there ah, where ah, this is where, most (type in spaces), and so we're kinda say "most of" with extra spaces.

(on screen: <body>) This is where most of my information goes.

Dr. U: Let's go ahead and save that, ftp it, reload it… didn't do anything. Now how about that? Extra spaces like extra p don't do anything. This is really important. What if for example I want this to be a paragraph where I wanted to get five spaces? What will I normally do? What I will normally do is I will normally go here (beginning of sentence) and I will go (put spaces) one, two, three, four, five! Okay, then I will save it, and I will ftp it. And I'll reload it, anyone predict what it would be like? (Students murmur a reply.) Let's see… (Nothing changed.)

Student: Is the ftp working? I mean, the question is, are we… 'coz everytime we currently change something, it doesn't get changed.

Dr. U: Could it be the ftp problem? Could it be…Oh, yes! Could something be broken? Oh, maybe. Let's check. Good thing to check. Let's go ahead and check that out. (Typed in some changes that has nothing to do with

putting spaces.) We'll just do that. What he's suggesting is great problem solving. Maybe all these stuff should be changing but there's a problem with my ftp program all of a sudden. Possible?

S: Yes, very possible.

Dr. U: Very possible. So what we're gonna do we're gonna add another line. If that works, then I know that my ftp is okay. We'll save it. FTP it. And reload it. (It works.) All right, now.

(The class discusses some more and no one has any other idea. Eventually, Dr. U gives them the code.)

Dr. U: Now we've learned something here. What we've learned is that all we've got to make a space don't make do, why? You get one space, but that's it. And in the beginning of a line, you don't even get that. So what do you do with all that stuff? Well, it turns out that there's some other command. There is what is called a BR, which is a great command.
 Uhm, now I've got a br between "new line" and "stuff". Let's go see what that does. So I'll save it, ftp, and I'll reload it. Watch what happens? See what it did that time? It gave me a line break… It gave me a single line between, not a double line. Now, can I use multiple br's? I don't know, let's try that. Take that, control c, control v, control v, control v, like that. Let me throw in a bunch of those. I will save it, and ftp it. And now watch what happens over here. Let's see if it does anything. Hey hey hey… That didn't. So, a multiple, ah, if you want multiple lines like that, use the BR command."

Later during the class, however, a student asks another question.

S: What happens if you need more spaces in the beginning or extra spaces in the middle?

Dr. U: It allows you one space. If you want ... to put in extra spaces? You can do it, you can put in what's called "non-breaking spaces." There's a command for it. It is not a tag. Let's say I want to put in extra spaces here, it is   Ampersand. It's not in, not a tag. What it is is called a non-ASCII character. This character specifically says "non-breaking space". There are a number of these characters. I think about, depending on ***. Uh, go ahead and put   save it, ftp it, watch now. Did it move over? It doesn't move over much. We've got to put in more of them.

S: (reaction murmurs of students)(G puts in some more)

Dr. U: Control C, control V, put in a bunch of them. Save it. Let's do that. If I want extra spaces. It's   It has to be semi-colon. You have to start with the ampersand.

Dr. U's students have this to say regarding the session described above: "He didn't give it to us at all. I mean, he wanted us to try to troubleshoot and problem solve. That's the way he is. He wants you to pull it out." "He puts things that's wrong and then asks you why it doesn't work." "Just like in the networking class and we had problems. He'd just comment, 'Figure it out. What did you do?'"

Dr. U explained the importance of developing problem solving skills among the students. "One of the nice things about programming languages, programming in general is that if it doesn't work, you get immediate feedback. You see right away - it doesn't

work. So then, okay, you try something else. It's that problem solving process that I really want them to begin thinking about. Because inevitably, at the end of the course in ten weeks, they may be writing computer programs but I'm not gonna be there to tell them how to do it. They're gonna have to figure it out for themselves."

Analogy. Dr. U often used analogies while teaching. Using an analogy is a great way of relating the new incoming knowledge with something that is already familiar to the students. When an analogy is used, students have a better means of grasping and retaining the concepts that has just been presented. Here are two examples:

"When you put your stuff up there, it doesn't do anybody any good, they can't find it. It's so like getting an unlisted phone number.... If you have an unlisted phone number, someone can call you up. But they may be random dialing. It doesn't prevent you from getting calls, but what it does is it prevents your friends from getting a hold of you unless you tell them what that phone number is. With web pages, it's exactly the same idea. You have to give them the web address. The web address is called the Uniform Resource Locator or URL."

"You notice that my tags are what're called nested tags or disjoint tags. An HTML and an end HTML and all those tags are in the middle. I've got head and slash head, and I've got title in the middle. The title begins after the head and ends before the end of the head. That's called nesting. Sort of like Tupperware bowls. We have bowls within bowls. Three of bowls within bowls within bowls. Or you can have two bowls that are completely separate, apart from each other. In fact right here. Head, slash head is completely separate from body slash body. So my tag pairs may either be nested like

Tupperware bowls, or they may be completely disjoint like I've got my head and body are disjoint."

Exploration. Dr. U encouraged the students to explore possibilities in creating websites. He asked questions such as, "Maybe you would like no border. Wouldn't it be nice to have no border?" To which students usually responded, "Yes!"

Dr. U encouraged the students to try things out. "Go ahead and try it. We can try it. And what I want you to do is to start asking these kinds of questions. (Silence while typing) Save it. Anybody have any predictions as to what it will do?"

Problem solving, illustrating through analogy and the exploration of possibilities are ways of creating and recreating knowledge that constructivists say lead to students ownership of knowledge. In this process, the computer is indeed a most appropriate learning tool as students can easily make changes and undo mistakes. Overall, we can see that computers and constructivism are quite compatible.

Convergence

We have seen a divergence in culture, as shown by the differences in classroom dynamics and cultural cognizance. What could account for this convergence of views when it comes to technology? Let us begin from the point of view of culture. The US and the Philippines do share some cultural similarities. Taking Hofstede's dimensions of culture, both the US and the Philippines have weak uncertainty avoidance and high masculinity. Nations that have low uncertainty avoidance hold a certain degree of skepticism toward technological solutions (p. 169). Innovations are welcome but not necessarily taken seriously (p. 170). These may account for the problems in integrating technology that both groups mentioned.

However, a more interesting point was put forth by Hofstede himself. Hofstede viewed technology as a cause of convergence in values. "We should expect convergence in the masculine/feminine dimension over time," he explained. "Global developments in population age structure, technology and the state of the environment will cause all countries to shift along this dimension while maintaining their divergence" (Hofstede, 2001, p. 333). This is so because for one thing, "technological and social developments enable even women with young children to participate in society outside the home, along with men. ... Technology imposes changes on work itself. The ongoing information revolution eliminates many old jobs and creates new ones. ... In balance, technological developments are more likely to support a need for feminine rather than masculine values in society" (Hofstede, 2001, pp. 334-335).

Technology and globalization are deeply intertwined. It is through technology that people from all over the world are able to in touch with each other, creating a global market which served as an impetus for greater technological advances. What the US and the Philippines are experiencing then, in terms of technology, is of a global nature. And given the global nature of this experience, we can expect similarity in experiences, challenges and response. This includes the use of constructivism as the pedagogical approach for teaching technology to education students.

Chapter 5

Conclusion

This was a cross-cultural comparative-case study of two technology classes for education students in the United States and in the Philippines. Both groups were graduate level courses in which the students learned to create static websites using HTML. Sources of data included classroom observations, interviews with individual students and the professors from each class, and focus group discussions. Findings showed that there are cultural differences in terms of classroom dynamics, cultural cognizance, and specific technology issues discussed in class. American students asked a lot of questions during class whereas Philippine students kept asking questions at a minimum. For American students, asking questions was a way to be active participants in the classroom. For Filipino students, silence was a strategy for gauging the social climate in the classroom and for maintaining group harmony. A discussion of Filipino and Western culture often came up in the Philippine classroom. The major issues discussed there were culture, curricular content, and which language to use in designing for instruction. As for the discussion of cultural issues in the American classroom, this was absent. In the US class, the discussion basically centered on the prices of commodities and the language of the Internet. In spite of this, convergence was also observed between the two groups. Convergence emerged from the beliefs and experiences that the participants had with technology. Both groups agreed that technology was a powerful tool for teaching and learning. They also had similar difficulties in integrating technology in education. These difficulties originated from teachers' fears of using computers, their lack of teacher training, and the lack of

administrative support. There was also convergence in pedagogical practice. Both professors practiced constructivism in their classes. This was reflective of recent literature in the field of Education. As the literature showed (Chen, 2001; Wong, Ab Jalil, Fauzi Mohd Ayub, Abu Bakar, & Tang, 2003; Sahin, 2003; Joia, 2002), there were several cases in which the teaching of technology and the practice of constructivism went hand in hand.

The reasons for divergence and convergence in the teaching and learning practices of these groups were well explained with Hofstede's (2001) cultural dimensions of individualism/collectivism, power distance, uncertainty avoidance and masculinity/femininity. Convergence results from the high level of masculinity and the low level of uncertainty avoidance reflected in both the Philippine and the American contexts. Experience with technology is also similar in both settings. However, cultural differences between them lie mainly on US being an individualistic nation with low power distance among its citizens, and on the collectivist nature of the Philippines society in which there is a high power distance between individuals.

These findings have implications on educational reform, specifically on the importance of context in instructional design. As universities and teacher education centers are going global, context should be taken into consideration in planning learning environments involving diversity. It is important to consider the learners' culture during the transfer of knowledge and pedagogy from one nation to another.

Changing times call for changes in pedagogical practices. We educators have always been in the process of finding ways of improving the delivery of instruction. Globalization and advances in technology have afforded us access to information on how

teaching is being done in other countries. As we get into this endeavor of educational reform, we have to bear in mind that context is a very important factor during the transfer of knowledge. According to Hofstede (2001), "the transfer of technology is always implicitly also transfer of culture" (p. 423). Hofstede ascribes the failure of development aid to culture because what works in one country will not necessarily work exactly the way it did in another country. Consequently, adaptations have to be done taking into consideration cultural differences and the local context.

During this age of globalization there are at present global efforts in integrating technology in teacher education. Wallace and Hakes (1999) wrote that the use of technology goes to the core of educational reform. Without technological advancement and support, school and teacher education reform is impossible. Matriano (2000) also emphasized the important role technology plays in teacher education reform. Technology is one dimension in the three-dimensional framework for reforming teacher education that she proposed, naming it "the instrument of instruction" (p. 86). This is one major reason why cross-cultural educational researchers need to study technology classes. Since there are similarities in experiences in technology, it is useful to know how the teaching of technology to education students are being carried out in teacher education centers worldwide. As this study has shown, although there are cultural differences between national educational settings, there is convergence when it comes to teaching technology. Further research on how constructivism comes into play in teaching technology is needed. The two professors in this study both verbalized their use of constructivist practice. What was similar was that students in both classes worked on individual web projects they could use in their own teaching. What was different was

that the Philippine professor worked with students individually whereas the US professor walked through procedures with the whole class, with emphasis on problem solving. Since cultural issues affect how people learn, these should be addressed sufficiently with the use of constructivist philosophy in teaching technology. To put it another way, constructivism seems to provide the necessary flexibility for addressing the academic needs of a diverse student population. The study of culture and the use of constructivism are two items that should be considered in teacher education reform. In other words, as we engage in educational reform in teacher education, integrating technology and using constructivism are two good leads to pursue.

The findings of this study also support multicultural education. Hofstede (2001) pointed out that "not only will cultural diversity among countries remain with us, but the new technologies may even increase differences between and within countries" (p. 453). As people become more exposed to other people around the world, they gain insight to the culture of their own people. However, with the world becoming more global, the chances of working with individuals from diverse cultural backgrounds are also increasing. Hofstede (2001) wrote that people from cultures very dissimilar on the national culture dimensions can cooperate fruitfully, as proven by the IBM corporation. IBM employees throughout the world cooperated in reasonable harmony toward practical goals. In the field of teacher education, the opportunity for learning from one another is huge. However, we need to be skillful in multicultural interactions to maximize the potential of an international exchange of ideas. Since classrooms are becoming more diverse with the increase in people's mobility, it is also very important for future teachers to be skillful in multicultural encounters. As major instructional designers, it is crucial

for all teachers to have intensive multicultural education. With multicultural education, teachers will develop the necessary cultural competency which should include context sensitivity and cultural maturity. Cultural maturity is one way for teachers to address the needs of every learner in their classes, the Human Being which is another dimension in the three-dimensional framework for reforming teacher education that Matriano (2000) proposed. Unfortunately, although multicultural education courses will be helpful, Hofstede (2001) pointed out that intercultural skills can only be acquired on the spot. A thorough multicultural education must therefore include intercultural encounters. The best way to do this is by traveling and staying in a foreign country for an extended amount of time. Visiting a foreign country for three days and staying in a hotel will not provide one with enough insights into the foreign culture. A few weeks of staying at the home of a foreign host family, school visits and interactions with local teachers and students will have more impact. Recently, international conferences and conventions provide such opportunities for participants. It is highly recommended for educators to join such conferences. Membership in international organizations will also help us maintain contact with educators from other countries. The world is culturally diverse and the way to peaceful and successful interactions is for each of us to be interculturally skillful. The way to do this is through multicultural education and authentic encounters. Teacher education should address this need by incorporating multicultural education and intercultural experiences for all future teachers.

A major issue that came up several times in this study is language. Language is a huge issue, especially in the Philippines which, in the global arena, has a minority culture. Indeed, language embodies so much of culture. As Hofstede (2001) pointed out,

"information is more than words: it is words within a cultural framework" (p. 451). He stated that in the process of translating a message, a huge part of the message will be lost. A great way of illustrating this is through poetry. If you know two languages, try translating a poem written in one language to another language. The two may be similar, but the essence is gone. As Hofstede wrote:

> Having to express oneself in another language means having to adopt someone else's frame of reference. If one does not know the language of one's country of residence, one misses a lot of the subtleties of the culture and is forced to remain a relative outsider, caught in stereotypes. Language is a "vehicle for our thoughts." (p. 425)

Crossley and Watson (2003) also emphasize the importance for cross-cultural researchers of being competent in the languages used in their research fields. Since language is the vehicle for teaching (Hofstede, p. 451), it is therefore highly recommended that educators should learn several foreign languages. This will ensure more successful teaching in one's own diverse classroom and more successful encounters in our diverse world.

The findings of this study also support the need for more cross-cultural research. These are quite feasible to do now with today's advanced technological tools. Educators stand to benefit so much from learning how the teaching of technology using constructivism is being done in other teacher education centers, to name just one possible area of study. Not only do educators learn about procedures, but cross-cultural research takes into account the context, which yields important insights. There are many ways one

can engage in cross-cultural research, though researchers should address the issues of cultural baggage, context sensitivity, language and purpose.

I would strongly recommend that international students engage in cross-cultural research. Being familiar with at least two cultural contexts and two languages places them in a good position to do so. Engaging in cross cultural research will also provide them important insights as to the kind of adaptations needed in the process of knowledge transfer. According to Hofstede (2001), gifted young people sent as scholars abroad have not made much of an impact in their home countries because of context. Students who study abroad learn skills that are important in their host countries. They also imbibe the host country's culture. What they learned may not be as useful in their home countries and they may find difficulty readjusting to the local culture. For this reason, many of these scholars stay in their host countries. Hofstede (2001) stated that "it is unfortunate that the payoff for poor countries of sending students abroad is often low" (p. 437). What works in one country will not necessarily work in another. But if these scholars were given training in multicultural education and were engaged in cross-cultural research between their host and home countries, they will then develop the necessary context sensitivity and cultural skills. This way, they will be more able to make a difference in both countries and the world at large.

I also recommend that American students conduct international studies. There is so much personal and professional knowledge that can be gained by getting out of one's own culture and exploring another. Conducting an international study will prove to be a very enriching experience.

In closing, this research has shown that there are both divergence and convergence between the two classes in the US and the Philippines. There are cultural differences especially in classroom dynamics, cultural dynamics, and specific issues discussed in class. However, when it came to technology, there is a convergence in views, experiences in integrating technology and the practice of constructivism in teaching technology. These findings support the need for multicultural education, multilingualism, and opportunities for authentic multicultural encounters in teacher education. It also supports the need for more international or cross-cultural studies. I recommend that both international and American students be engaged in cross-cultural studies since engaging in cross-cultural studies will provide them opportunities to gain important insights and context sensitivity.

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Appendix A

Informed Consent Form

University of Cincinnati

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PO Box 210002
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Division of Teacher Education
Curriculum and Instruction
Early Childhood
Elementary Education
Literacy
Secondary Education
Special Education

608 Teachers College Building
Fax (513) 556-1001

Informed Consent

Introduction

Before agreeing to participate in this research study, it is important that the following explanation of the proposed procedures be read and understood. It describes the purpose, procedures, risks, and benefits of the study. It also describes the right to withdraw from the study at any time. It is important to understand that no guarantee or assurance can be made as to the results.

Purpose of the Study

The purpose of this study is to observe two teacher education technology classes in order to investigate the professors' approach to the issue of using the Internet and computer software in teaching. I, ..., give permission to participate in this research study in which the researcher will observe our class. In addition, I understand that I may be asked to answer questions or comment on our class and to provide sample projects done in class.

Procedure

I understand that the researcher will be present for at least six class meetings to observe. I also understand that the class will be videotaped during at least three class sessions. I understand that the researcher will also conduct student interviews and a focus group discussion. I understand that the interviews and the focus group discussion will be audio and videotape recorded for later transcriptions. I understand that the principal investigator will be the only person who can view and listen to the tapes. I understand that the audio and videotapes will be kept in a locked file and destroyed following research publication.

Potential Risks and Injuries

I understand that possible discomfort may result from discussing my thoughts and feelings regarding our class and this is, therefore, a risk involved with my participation in this study. However, should this discomfort occur, I will have the right to determine whether I wish to continue to participate. I realize that participation in this study, or the decision to withdraw my participation, will in no way affect my professional relationship with the researcher or with my professor. I also have the right to discuss my discomfort with the principal researcher, Minerva L. de la Paz, (047) 224 7401 or to the researcher's advisor, Dr. Piyush Swami, 001 (513) 556 3573.

I realize that this study may provide insight to professor's approach towards the issue of using the Internet and computer software in education, therefore, providing possible future educational benefit.

The Rights of the Participants

I understand that participation in this study is voluntary. I may refuse to participate in this study without penalty. If I choose to participate in this study, I may choose to withdraw my participation from this study at any time with a verbal or written request for termination. Any uncharacteristic distress (verbal protest or denial, crying, leaving the area) demonstrated by any participant during observation, will result in the termination of that observation or study. I have the right to contact the researcher or the researcher's advisor should any questions arise concerning this investigation.

Confidentiality

I understand that the information from the videotape recorded class sessions and interviews is considered data for the study. Confidentiality will be provided by removing names and all personal identifying information from the tapes and written transcriptions. No names will be used in reporting study findings. However, excerpts of the interview may be used to support study findings. The transcriptions will be done by the researcher. Tape recordings will be kept in a locked file and destroyed after research publication. Only the researcher will have access to this file.

Consent Statement

I, the undersigned, have understood the above explanation and have given my consent to voluntarily participate in this study which investigates a technology class for education students in a classroom setting.

_____ _____

Signature of Participant Date

_____ _____

Signature of Investigator Date

Appendix B

Initial Survey

Please be assured that the following information will be kept confidential.

Name: .....

Program: .....

Year: .....

Phone Number: .....

E-mail Address: .....

Will you be willing to:

1. Be interviewed one-on-one? Yes No Maybe

2. Join a small group discussion? Yes No Maybe

3. Allow the researcher to submit
   your signed informed consent form,
   thereby divulging your real name? Yes No Maybe

Appendix C

Interview Guide for the Professor

1. How long have you taught computer courses? How long have you been teaching this course?
2. What are your overall objectives or goals for this course? What kinds of activities and assignments do you have students doing?
3. How do you go about teaching software applications? What are the major messages you want to convey about software and their usages in classrooms and other settings?
4. How do you go about teaching the Internet? What are the major messages you want to convey about the Internet and how it can be used in classrooms and other settings?
5. How would you describe your approach to the issue of using software and the Internet in the classroom?

Appendix D

Individual Interview Guide for the Students

My name is Minnie de la Paz. I'm a doctoral student at the University of Cincinnati. I'm doing a research project – a case study on the teaching of technology to education students. Your responses to the following questions will be tape recorded, videotaped, transcribed, and stored in a locked file cabinet. You may refuse to answer questions, turn off the recorders, or withdraw from the interview at anytime. Your names will be changed in transcripts, publications, and other written materials in order to ensure confidentiality.

I. Background

How long have you been a student in this university? What program are you enrolled in? What degree are you working on? Where do you work? (If teaching, what level do you teach?)

II. Global

What made you take this course? How is the course being taught? Describe some classroom activities and assignments. What did you expect to learn? Are your expectations of the course being met by what you're being taught? Rate your knowledge about the Internet and software programs before taking this course. After.

III. Focused Questions

What is your instructor teaching you about software? What is s/he teaching you about the Internet? What is s/he trying to emphasize with regards to the use of the Internet and software programs in education? How has this course affected the way you plan to use software and the Internet in classrooms? Other settings?

IV. Closing

Is there anything else you would like to say about your experience in this class?

Appendix E

Focus Group Discussion Guide

My name is Minnie de la Paz. I'm a doctoral student at the University of I'm doing a research project on how professors approach the issue of using the Internet and software programs. Your responses to the following questions will be tape recorded, videotaped, transcribed, and stored in a locked file cabinet. You may refuse to answer questions, turn off the recorders, or withdraw from the interview at anytime. Your names will be changed in transcripts, publications, and other written materials in order to ensure confidentiality.

Opening

Tell us who you are, why you took this class, and what you do when you're not in this class.

Introductory Questions

1. Are you teaching? What level do you teach?
2. What comes to your mind when you hear the words "computers in the classroom?"

Transition Questions

3. Have you used computers in your classroom? How have you used it? Briefly tell us about ways you've used the computer in your classroom.

Key Questions

4. What is it like being in Dr. X's class? Tell us something you learned in this class which you used recently in your classroom.
5. What is your instructor teaching you about software? What is s/he teaching you about the Internet? What is s/he trying to emphasize with regards to the use of the Internet and software programs in Education?
6. How has this course affected the way you plan to use software and the Internet in classrooms? In other settings?
7. Describe your professor's approach to the issue of using technology in the classroom.

Closing

8. Have we missed anything? Is there anything you'd like to add to this discussion?