# THE IMPACT OF RACIAL AND ETHNIC DIVERSITY ON FACULTY PERCEPTIONS OF THEIR INSTRUCTIONAL ROLES

# By

# Richard B. S. Morris

B. S., Geneva College, 1997

M.S. Organizational Leadership, Geneva College, 1999

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This dissertation was presented

by

Richard B. S. Morris

It was defended on

April 11, 2005

and approved by

Dr. William Thomas, Professor, Department of Administrative and Policy Studies

Dr. James K. Dittmar, Professor, Department of Leadership Studies, Geneva College

Dr. Don Martin, Professor, Department of Administrative and Policy Studies

Dr. John C. Weidman, Committee Chair, Professor of Education and Sociology, Department of Administrative and Policy Studies

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#### Richard B. S. Morris, EdD

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The classroom is a dynamic social space. When faculty members and students enter that space for purposes of teaching and learning in a racially and ethnically diverse context, there are many actors that come into full participation: faculty members, students, the curriculum, cultural and ethnic diversity, challenges associated with racial and ethnic diversity such as culturally-based learning styles, prejudices and stereotypes, expectations between faculty and students, among other things. The extent to which faculty members are effective in conducting their instructional roles is impacted by their awareness of the classroom dynamic, the opportunities and challenges it provides for teaching and learning, and how adequately they are prepared to overcome the effects of the challenges and optimize the teaching and learning opportunities. This dissertation set out to explore, using faculty experience (in number of years), how culturally-based learning styles/preferences impacted faculty instructional roles: how faculty perceived their roles, their choice and use of course content, and their choice and use of teaching and evaluation methods.

To gather such data, forty out of seventy faculty members teaching in one of the most racially and ethnically diverse higher education institutions in the continental United States responded to a survey, and fifteen were interviewed. The result shows that while teaching experience is important to understanding a classroom context, in the

racially and ethnically diverse classroom, numbers are not an adequate measure of experience. Experience involves understanding and adequately responding to the racially and ethnically diverse classroom. It consists of intellectual, personal, and relational dimensions. To acquire these, faculty must be committed to acquiring self-knowledge first, and then understanding their need to develop sensibilities for understanding and interacting with race and ethnicity. This yields credibility with students and, eventually, instructional effectiveness. Except for a few instances, years of teaching experience in the racially and ethnically diverse classroom did not have direct affect on how faculty perceived and performed their instructional roles, and faculty preferred to view their commitment to racial and ethnic diversity as a better measure of experience rather than the number of years they have taught in such contexts.

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## **PREFACE**

In life, while we often do not remember the details of every encounter, and everyone we meet and interact with, there are some people and some things that are difficult to forget. As I was writing this dissertation and working to support my family without much relief, one phrase kept on reverberating in my head, "PRESS ON! PRESS ON!" I want to thank Dr. Noreen Garman for writing this phrase on my papers during my first year of doctoral studies nearly six years ago. This phrase constantly reminded me that doctoral study is a journey, perhaps a race more like a marathon, and those who press on eventually get to reach the finish line.

How fortunate I was to have an advisor such as Dr. John Weidman! Not a day was he ever upset with me personally or my work. Rather than be critical and discouraging, he was always encouraging and supportive of my work. He was graceful in his advice, and very caring in his demeanor. I have become a better thinker and writer because of him. Thank you, Dr. Weidman, for being a great supporter of my educational endeavors. The journey has been worthwhile because of your personal leadership and encouragement as my advisor.

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Finally, my beloved wife, Victoria, and my wonderful children Kutu, D. J., Leela, and Enoch, this one is for you. You and I have labored together. You were prayerful, encouraging, and supportive. You gave me hugs when I needed them. You gave me space when I desired it most. And you sheltered me with your love as you have always done. As long as life exists, let us continue to labor together to make this world a better place for one more person. That is true religion. May the God we love and serve so passionately together remember this, even as He seeks to honor and glorify Himself by this work and its benefits.

## 1.0 CONCEPTUAL FRAMEWORK

#### 1.1 PURPOSE

The need to understand the impact of racial and ethnical diversity on the higher education context has attracted more interest on the part of educational leaders and scholars over the last three decades than at any other point in recorded history (Richardson & Skinner, 1990; Maruyam, Moreno, 2000; Gudeman & Harvey, 2000; Marin, 2000). The research literature is broad in scope, covering issues ranging from the impact of institutional climate on minority status student development (Hurtado, 1992; Springer, et al., 1995; Hurtado, Carter, & Kardia, 1998) to educational and democratic benefits of racial and ethnic diversity (Bok & Burkhart, 1999; Milem, 2001; Gurin, Dey, Hurtado, & Gurin, 2002; 2003; Chang, Astin, & Kim, 2004; Antonio, et al., 2004); from faculty perceptions of and attitudes toward the enactment of racial and ethnic diversity (Green, 1998; Bahr, 2000; Marin, 2000; Aleman, 2002; 2005) to learning styles and language issues in the racially and ethnically diverse classroom (Wolfgang, 2001; Le Roux, 2001; De Vita, 2001); from the impact of race and ethnicity on teaching methods (Marin, 2000) to ways teacher can prepare for the racially and ethnically diverse classroom (Wolfgang, 2001; Le Roux, 2001; Brown & Dobbins, 2004). One key reason for this high level of interest is that it is important to understand the opportunities and challenges such an environment presents for teaching and learning.

However, while racial and ethnic diversity may have challenges associated with implementing it, it provides enormous benefits for education in a pluralistic democracy (Astin, 1993; Hurtado, 1999; Gurin et al., 2002; Terenzini et al., 2002; Brown, 2004; Odell, Korgen, & Wang, 2005). According to Gurin et al. (2002), racial and ethnic diversity is associated with "active thinking skills, intellectual engagement and motivation, and variety of academic skills" (p.333). This conclusion has been supported by other studies. According to a study conducted by Chang, Astin, and Kim (2004), racial and ethnic diversity is associated with social and civic interests, as well as intellectual abilities. This study also showed that white students gained in their abilities to relate cross-culturally when they were exposed to a racially and ethnically diverse environment, and these students were more likely to be committed to racial understanding.

In addition to its positive impact on intellectual and social skills, racial and ethnic diversity is also associated with growth in leadership skills, cultural awareness, and cross-racial understanding (Astin, 1993). These benefits that students gain when educated in racially and ethnically diverse education environment have more than personal value. Long after their college years, these students may become responsible citizens who may be better positioned as conciliators at various levels in society. Such a skill is valuable in a pluralistic democracy such as the United States. But there is further evidence that racial and ethnic diversity in higher education environments have economic and security value.

In the *Gratz & Grutter v. Bollinger at al.* trials, this fact was evident by the representation of the U.S. military, retired military generals, and the business community's support to the University of Michigan. The military, joined by retired generals, pronounced that it cannot become the fighting force that it is expected to be

without racial and ethnic diversity in its ranks, and corporate leaders, in a similar manner, argued that they need a qualified workforce to compete in the global marketplace, which cannot be achieved without racial and ethnic diversity at the college and university level. Yet, racial and ethnic diversity has been difficult to implement at the college level for various reasons. One of these reasons is that it introduces a host of challenges that must be overcome by institutions who are committed to implementing it. These challenges put various pressures on institutional resources at various levels. To implement racial and ethnic diversity, resources and personnel must be committed to the effort. However, there are additional challenges that racial and ethnic diversity introduces at the level of the classroom. These challenges and their affects encompass the subject of this study.

Challenges that racial and ethnic diversity present in the higher education context include, but are not limited to, language comprehension (Sandu, 1994; Adger, Christian, & Taylor, 1999; Wolfgang, 2001; Le Roux, 2001; De Vita, 2001), academic quality (Richardson & Skinner, 1990; Astin, 1992; Moore, 2004), the intellectual stigma felt by minority-status students, which inhibits their performance (Le Roux, 2001; Brown & Dobbins, 2004), prejudice and stereotypes across racial and ethnic boundaries (e.g., the prejudicial attitudes and stereotypes European American professors and students hold toward minority-status students, and vise versa) (Epps, 1995; Le Roux, 2001; Rothschild, 2003; Brown & Dobbins, 2004), and lastly how faculty members make use of effective teaching methods to overcome these challenges (Combs, 1978; Blake & Others, 1989; Sandhu, 1994; Epps, 1995; De Vita, 2001; Brown & Dobbins, 2004). While the racially and ethnically diverse learning environment provides enormous possibilities for enriched discussions (Terenzi, Cabrera, Colbeck, Bjorklund, & Parente, 2002; Gurin, Dey,

Hurtado, & Gurin, 2002, 2003), the challenges that it presents to teaching and learning, particularly in the classroom, must be identified and addressed if its benefits are to be maximized, because "cultural pluralism places increasing demands on the resources and skills of classroom teachers" (Inoue, & Johnson, 2000, p.2). Despite the plethora of studies on racial and ethnic diversity and its effects, fewer studies actually have discussed the challenges racial and ethnic diversity present to teaching and learning.

# 1.1.1 Purpose Statement

The research on the challenges that racial and ethnic diversity presents to the educational environment remains inadequate. While the racially and ethnically diverse learning environment is considered among the best environments for learning, particularly in a pluralistic democracy such as the United States (Gurin, Dey, Hurtado, & Gurin, 2002, 2003), educators must continue to identify and address the challenges posed by racial and ethnic diversity in the classroom if learning in such context must be optimized. Anderson (1989), Sandhu (1994), De Vita (2001) have clearly advised that faculty who teach in the racially and ethnically diverse classroom encounter diverse and culturally-based learning styles to which they must adjust their teaching if they are to be effective. Even though such a classroom setting has been the focus of many studies, those studies have been limited in showing how faculty members who teach in such contexts have shown an ability to teach to the needs that such contexts possess. The trend has been that, while many of those needs – learning styles/preferences, prejudice and stereotypes, intellectual stigma limiting learning for students of minority status, academic remediation, just to name a few – are being researched and discussed, there are fewer studies done to

determine how faculty are responding to them, or at least what faculty might do to respond to such needs.

Furthermore, while some studies have been done on faculty perceptions of and their apparent dispositions on racial and ethnic diversity, these studies have not been done in settings that are racially and ethnically diverse in the continental United States (Maruyama & Moreno, 2000; Gudeman, 2000). Therefore, it is immensely important to have research pertaining to faculty perceptions and behaviors about racial and ethnic diversity in the classroom. These must be studies that are done in contexts that are actually racially and ethnically diverse. Inoue and Johnson's (2000) research done in Guam is an example of such studies, but they must be done in racially and ethnically diverse classrooms in the continental United States. It is also important that when research uses faculty as a unit of analysis to determine a need affecting racial and ethnic diversity in higher education, those faculty members should be equipped to provide reliable, first-hand account of those needs because they are speaking from personal experience.

Therefore, the purpose of this dissertation is to identify some of the major challenges in the racially and ethnically diverse classrooms and how one of them, namely, learning styles/preferences, has affected faculty instructional roles. To determine the impact of learning styles/preferences – a characteristic of the racially and ethnically diverse classroom – on faculty instructional roles in a particular educational setting, one must determine how faculty members have been able to react or respond to the challenges that learning styles/preferences present. This must be in terms of their perceptions of their roles in the classroom, the choice and use of course content, their choices and uses of

various pedagogies, and how they evaluate student learning (Anderson, 1989; Sandhu, 1994; De Vita, 2001; Le Roux, 2001). Such a study must consider experience as a factor because it has been shown that faculty members' experiences in teaching in a racially and ethnically diverse context may actually affect faculty perceptions of/about diversity (Inoue & Johnson, 2000; Milem, 2001). Consequently, as this study attempts to determine the impact of racial and ethnic diversity on faculty instructional roles vis-à-vis their reactions and responses to learning styles, the affect of experience on those roles, as a major or minor factor, will be important to know.

#### 1.1.2 Problem Statement

Gola University (a pseudonym), the setting of this study, was considered to be one of the most racially and ethnically diverse educational institutions in the continental United States by the *U.S. News & World Report* in 2002. Because it is a private higher education institution, some have wondered how it has been able to accomplish such a feat, since the level of commitment to racial and ethnic diversity among higher education institutions has been mostly expressed in words than action. Most higher education institutions – both public and private - have mission statements that contain commitment statements to racial and ethnic diversity, but little can be seen among their student bodies and faculty to represent those commitments. As evidenced by the research literature, many scholars believe that the absence of racial and ethnic diversity in these educational institutions is due to the fact that too many challenges are associated with the implementing racial and ethnic diversity, and any institution that is determined to remain academically competitive may have to make enormous sacrifices in terms of resources on remediation and other programs to not only assist under-prepared students of minority status, but also

to create a climate that is welcoming and accommodating. One domain of these challenges is the classroom, where they impact teaching and learning. This study seeks to know how some of faculty instructional roles at Gola University have been impacted by one of these challenges, namely, learning styles/preferences, and the role that faculty members teaching experiences in that context have played, if at all.

#### 1.1.3 Research Questions

The questions addressing the research problem assume that faculty experience in teaching the racially and ethnically diverse classroom influences how much they know about the challenges of the classroom and how those challenges impact their instructional roles. As Trigwell and Shale (2004) have indicated in their Scholarship of Teaching model, context knowledge is part of faculty asset: faculty is required to know and understand the challenges and opportunities of the learning context in order to be able to better meet the needs through their work. Since knowledge is related to time-on-task (Astin, 1999), it is assumed, therefore, that faculty with longer teaching experience in teaching in the racially and ethnically diverse classrooms will more likely have better knowledge of that context. Therefore, the following research questions seek to determine how faculty experience in teaching affect their perceptions of the presence of culturally-based learning styles/preference differences (Anderson, 1989; Sandhu, 1994; De Vita, 2001) in the racially and ethnically diverse classroom have impacted their instructional roles:

1.) How has faculty experience with teaching in the racially and ethnically diverse classroom affected their awareness of culturally-based learning styles/preferences among students of minority status?

- 2.) How has faculty experience with teaching in the racially and ethnically diverse classroom affected their choice and use of diverse teaching methods?
- 3.) How has faculty experience with teaching in the racially and ethnically diverse learning classroom affected how they choose course content?
- 4.) How has faculty experience with teaching in the racially and ethnically diverse classroom affected their perception of their roles in the classroom (e.g., facilitator, collaborator, or coach)?
- 5.) How has faculty experience with teaching in the racially and ethnically diverse classroom affected their choices and uses of evaluation methods?

# 1.1.4 Significance of the Study

This study is an extension of recent studies on racial and ethnic diversity in the classroom. The foci of most of the studies on the racially and ethnically diverse classroom have been to determine the educational and democratic benefits of racial and ethnic diversity (Maruyama & Moreno, 2000; Marin, 2000; Gudeman, 2000; Gurin, Dey, Hurtado, & Gurin, 2002). A smaller line of studies on the racially and ethnically diverse classroom has, however, focused on challenges that a racially and ethnically diverse classroom experiences (Epps, 1995; Cazden, 1998; Wolfgang, 2001; De Vita, 2001; Le Roux, 2001; Brown & Dobbins, 2004). Some of the challenges identified by these studies include learning styles proliferation, language challenges experienced by some students of minority status, and intellectual stigma. While the racially and ethnically diverse learning environment is beneficial for teaching and learning in a pluralistic democracy as the United States (Gurin, Dey, Hurtado, & Gurin, 2002, 2003; Chang, Astin, & Kim, 2004), this study recognizes that those benefits cannot be sufficiently

accrued unless the challenges posed by diversity are known and addressed by faculty members teaching in such contexts, and one of the best ways to do so is through the effective exercise of their instructional roles. This study is significant because it seeks to provide findings that inform the line of research addressing the challenges posed by racial and ethnic diversity in the classroom and how faculty have and should address them.

Another value of findings from this study will be in the area of faculty development and teacher preparation to teach in diverse contexts. It may also be particularly helpful to new and inexperienced faculty at the college level in learning how to optimize learning in racially and ethnically diverse classrooms, in order that they may improve their effectiveness right from the start, rather than on learning-as-you-go basis.

# 1.1.5 Context of Study

Gola University is a private, faith-based higher education institution that has made significant strides in enriching the racial and ethnic diversity of its student body. For over a decade, Gola University has been known as a leader in the charge to educate all citizens of the United States. It currently has a 47.3 percent non-Caucasian student population (e.g., minority status and non-White international students) in its traditional undergraduate program. Of the 47.3 percent, 45.1 percent are students of minority status (e.g., members of U.S. minority student populations). The purpose of this study is to apply the findings of prior research to understand how Gola University's teachers perceive the impact of racial and ethnic diversity in their classrooms, specifically on their roles as instructors.

Gola University is a small (in terms of undergraduate student population), private university founded in 1882. In the 1960s, it received accreditation as a Christian liberal

arts college. Historically, the university has always been committed to providing access to all qualified students. In the 1970's, however, Gola University embarked on an aggressive diversity campaign that led it to prioritize, invest resources, and deliberately come to terms with its historic roots and its founder's vision, namely, to provide educational opportunity to all who need it and are qualified to receive it, regardless of race, ethnicity, nationality, and socio-economic status. Part of the leadership's strategy involved creating a program that had as its exclusive function to accept, examine, and meet the needs of students who may have potential, talents, and the will to succeed in college but whose high school academic records and SAT scores did not reflect those possibilities. The leadership realized, as is evident in the literature, that people of minority status would represent a large portion of such a group, because they were susceptible to the effects of historic racism in the form of socio-economic problems. These socio-economic problems bred other problems that affected many students of minority status' ability to perform and excel in their coursework at the grade school level, thus inhibiting their abilities to develop their gifts and talents. The program would seek to meet the needs, specifically, of such students, but would also accommodate other students in the majority racial class who were affected by circumstances not of their own making.

In the process of developing this program, the leadership discovered that such a student population had special challenges such as different ways of learning and perceiving information. As a result, the leadership commissioned a team of faculty members who were responsible for the program to prepare to learn about how they could meet the needs of underprivileged racial and ethnic minorities. This would mean learning

to teach and counsel them, as well as integrating them into the higher education community to enable them to succeed. Thus, faculty were sent to roundtable conferences dealing with diversity and the underprivileged students at Teachers College at Columbia University, among others, for such training in the 1970's and the years that followed. These faculty members returned with the knowledge they had acquired and provided advisement to the entire University community and the leadership through seminars and workshops on diverse populations. Part of the strategy of this program was to prepare the entire campus community to the reality of dealing with, learning from, and growing with a new group of students that they were not used to engaging in academia. The state government also bought into the program, because by providing education to its most underprivileged and vulnerable students, potential future problems due to lack of college education, among other things, would be curtailed. Thus, the state has begun to provide funding for the program ever since.

The program works with the premise that many students have potential and the desire to succeed. Therefore, before students entering the program are enrolled, their academic records are examined, their SAT scores are analyzed, and they are interviewed so that their stories are known. Through this thorough screening process, certain students are discovered to be talented and determined to succeed, but their life's circumstances may have inhibited their ability to demonstrate that during their grade school years and on their SAT scores. Those students are separated from the others and entered into the program mentioned above. Through special remediation work and counseling, those students soon acquire the needed academic skills and integrated into the normal, traditional undergraduate program. Statistics show that the graduation rate of students

recruited under this program is higher than the normal student population. The leadership of the program showed how graduates of the program have gone on to graduate from Princeton and other world-class universities and become successful.

A supplemental program for students from out-of-state and international students is also instituted. This program seeks to meet the higher education needs of students who do not qualify for the previous program but may have similar circumstances. This program, in contrast to the previous one, has no state funding available to it. Also, it does not have any federal support, even though many of the students recruited and enrolled through it are American students.

However, in 1991, a new president was hired at Gola University. Having seen the value of the program, and his own personal commitment to educating the underprivileged and America's youth for global citizenship, the president and his staff decided to renew the institution's commitment not only to providing access for all qualified students, but also to creating a student body that was racially and ethnically diverse enough to represent the racial and ethnic composition of the American citizenry and the world. Gola University has been able to accomplish this goal through visionary leadership, dedication and commitment, investment of resources, and strong faculty support. When one of the faculty members who were part of the efforts in beginning the program for serving underprivileged populations was interviewed about faculty role in making the program a success, this is what she said:

To do diversity, it has got to be programmatic. I have been on the co-curricular and curricular committees. And over the years, there has been a curricular endeavor. We have fought through the notion that diversity should be instilled into each class and have made it part of our catalogue offering. The very mission of the institution comes out of our curriculum, instead of the other way around. So when we were planning the curriculum, each professor was challenged to

integrate diversity in terms of readings, diversity in terms of instructional application and assignment. I think we have worked relatively hard through the years to try to do this. We planned and executed diversity: we talked about cultural literacy, went to diversity workshops, read books about diversity, and we did things with gender and equity. To really come down to it, for a faculty member to appreciate the power and value of diversity, he/she must first and foremost consider themselves a social ethnic being. That knowledge helps them to appreciate and understand what others of minority status go through in a culture that is different. So we were deliberate, and we continue to be.

Among schools that have succeeded in creating ethnic and racial diversity, Gola University is a special case because it is private and small. Most schools engaged in racially diversifying their student bodies have been government supported, and their reasonable level of commitment to racial and ethnic diversity is a result of their fiduciary responsibility to the public. Public institutions are created through government acts whether local, state or federal government (e.g., the land grant universities)—to meet the educational and social needs of their constituents (Rudolph, 1990; McMinn, 1995). It is important, therefore, that they be loyal to their constituents and faithful in fulfilling the intent and purposes of the acts that created them. An important part of that commitment is to implement government policies, as well as policies that do not violate government policies. Affirmative action, the one government policy that was created in part to provide access to and create equity in higher education to previously disenfranchised people of minority status in the United States, has been used over the years to create a racially diverse student body, especially at government supported institutions (Wood, 2002). While affirmative action has been debated vigorously by both the Republican and Democratic parties since its inception, it has served its purpose well, especially in increasing the number of citizens of minority status in the workforce and in higher education. But private colleges and universities are not required by law to implement

affirmative action policies. Affirmative action was created to achieve two purposes: 1.) to curb employment discrimination by institutions that take government contracts, and 2.) to create access for people of minority status at educational institutions that are federally funded.

Therefore, Gola University's commitment to diversity is self-imposed. The university has a set of core values that guides it in its mission: social relevance, academic excellence, global sensitivity, intentional diversity, and personal transformation. In describing how these core values have encouraged racial and ethnic diversity, Dr. D. T., the provost and vice president for academic affairs, said: "These Core Values really are the culmination of over 20 years of discussion at [Gola University] about diversity-related issues. At [Gola] we have tended to just get certain things done and then formulate statements so that the changes will be institutionalized" (Interview, 2005). The institution's core values are as follows, published on their website and through every printed artifact.

**Socially relevant:** Preparing students to serve in ministerial, educational, healing and community-building professions.

**Academically excellent:** Pursuing academic excellence in the spirit of grace and humility.

**Globally sensitive:** Fostering a global perspective within a multi-ethnic and multi-cultural Christian academic community.

**Intentionally diverse:** Providing educational access and support to motivated students from diverse socioeconomic backgrounds.

**Personally transforming:** Emphasizing the integration of faith, learning and spiritual transformation.

These core concepts are the framework within which Gola University implements its racial and ethnic diversity program. Table 1 shows six-year enrollment data for its

and ethnic diversity through its traditional student body. The total enrollment according to Table 1 for year 2000-01 was 912, and non-Caucasian student population was 39 percent. Of the total non-Caucasian, population non-Hispanic blacks made up 16.3 percent and Hispanic made up 12.1 percent. In the 2004-05 academic year, a total of 920 students were enrolled, and 53.5 percent were Caucasian students.

Table 1.1: Gola University: Traditional Undergraduate Enrollment by Race

Fall Term:	2000-01		2001-02		2002-03		2003-04		2004-05		2005-06	
	#	%	#	%	#	%	#	%	#	%	#	%
Asian	56	10.9	71	7.2	76	7.4	72	7.4	62	6.7	63	7.0
Black non-Hispanic	128	14.0	136	13.8	167	16.3	160	16.4	176	19.1	170	19.0
Hispanic	100	11.0	129	13.1	124	12.1	126	12.9	120	13.0	121	13.5
Native American	1	0.1		0	1	0.1	4	0.4	1	0.1	1	0.1
Multi-racial	20	2.2	27	2.7	28	2.7	25	2.6	29	3.2	39	4.4
Caucasian	554	60.7	584	59.1	596	58	552	56.6	492	53.5	471	52.7
Non-resident Alien	41	4.5	41	4.1	31	3.0	30	3.1	34	3.7	19	2.1
Unknown	0	0	0	0	4	0.4	7	0.7	6	0.7	10	1.1
TOTAL	912	100.0	988	100.0	1027	100	976	100	920	100	894	100

Of the total non-Caucasian population, non-Hispanic blacks made up 19.1 percent and Hispanics made up 13 percent. Finally, the 2005-06 student population has 19 percent non-Hispanic blacks and 13.5 percent Hispanic. The figures for this year (2005-06 school year) show a 47.3 percent in non-Caucasian enrollment.

The data in Table 1 are presented in a bar chart form (Figure 1.1). The graph shows the annual student diversity in two bars side-by-side. The bar on the left represents the non-Caucasian student population, while the one of the right represents the Caucasian student population. As the graph shows, over the last six years, this level of minority

status students has steadily grown. This fact is significant because it shows that commitment to racial and ethnic diversity has been consistent.

Gola University's diversity is not by happenstance; it is a result of calculated, visionary and strategic leadership effort. While the inclusion of minority status students was not new, when the president took office in 1992, he was determined to renew the

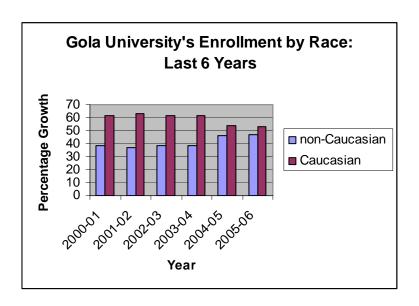


Figure 1.1 Gola University's Enrollment by Race (Source: University Research Center)

institution's commitment to racial diversity. In so doing, he announced that his administration would ensure that the diversity of the American society is fully represented among the student body. At minimum, such a bold stance on such a challenging issue represents a commitment and concern for societal wellbeing. As Chahin (1993) has indicated, it is a strong act of leadership. In a pluralistic democracy such as the United States, a commitment to racial and ethnic diversity helps to realize the democratic ideal of citizenship education as envisioned by Thomas Jefferson. As Benjamin Barber (1998) has noted, Jefferson believed that a functional democratic system depends on

broad civic participation, and broad civic participation requires education. However, broad civic participation is impossible with an uneducated citizenry. And true to its president's word, Gola University has continued to demonstrate an unflinching commitment to racial and ethnic diversity.

## 2.0 LITERATURE REVIEW

#### 2.1 INTRODUCTION

Creating a racially and ethnically diverse learning environment is challenging. Educators have to overcome limits on their ability to perform their role in society. Typically educators see themselves as custodians of knowledge and liberators of the mind (ASCD Yearbook, 1993) who help students develop to their fullest potential. As custodians of knowledge, educators seek to preserve cultural or canonical knowledge (e.g., proven historical facts, norms, and customs) by defining boundaries that limit or extend the creation of new knowledge through teaching and research (Gutek, 1998; Soltis, 1985). As liberators and developers of the mind, educators seek to minimize the forces that limit access to knowledge and learning and seek to maximize the avenues through which knowledge may be gathered or advanced. They seek to guard "the total social processes that bring a person into cultural life" (Gutek, p.4). In their quest to educate the nation's youth, however, educators often face challenges on several fronts. In the United States, these challenges include questions about the constitutionality of their actions (e.g., courts' rulings, legislative statues, and executive orders), socio-economic factors, problems of institutional leadership and shared governance, challenges posed by institutional climate and resource limitations of their particular institution, along with challenges associated with student diversity in the classroom.

This literature review frames these issues as limiting factors to the enactment of racial and ethnic diversity in the higher education context, and addresses them within the four environments in which they exist: personal, classroom, institutional, and external. These categories by no means create hard boundaries among the issues. For example, students' personal issues, such as their beliefs and perceptions, are affected by institutional climate. Or faculty members may perceive, react, or respond to racial and ethnic diversity based on their dissatisfaction with their role in institutional governance. The opposite is also true: Institutional climate is affected by its members' personal beliefs and perceptions conveyed through attitudes, behaviors, and actions, whether the members intend it that way or not (Hurtado, Carter, & Kardia, 1998; Hurtado, Milem, Clayton-Pedersen & Allen, 1999).

This means one thing: that while the focus of this study is to determine specifically how racial and ethnic diversity affect the role of faculty in the classroom visà-vis learning styles/preferences, as demonstrated through faculty reaction and response in and through their roles in the classroom, it cannot be addressed in isolation. Learning styles/preferences is but one challenge among many in the racially and ethnically diverse context. Therefore, this literature review does not address learning styles/preferences and faculty response issues in isolation; it extends to and considers more broadly the various environments that pose challenges to racial and ethnic diversity, including how faculty is impacted by those challenges. While many of the challenges highlighted by this literature review will not be investigated further by the research design and research questions in the methods section (chapter 3), they help to more broadly put this study in perspective. One cannot limit and focus the literature review on any aspect of racial and ethnic

diversity considered in a study of this magnitude without doing injustice to the issue and its roots. Context matters, especially in a study of this nature. In this study, this reality is even more pronounce, in that racial and ethnic diversity in the classroom affects students and faculty who are actors in a social environment that constantly influences their attitudes, behaviors and actions. The forces generated in the social environment – the classroom, the higher education community, and the larger society — that seek to limit racial and ethnic diversity are limiting factors and are more broadly addressed in the literature review.

# 2.2 PERSONAL LIMITING FACTORS: FACULTY PERSONAL BELIEFS

The factors that limit efforts to create racial and ethnic diversity emanate from a variety of sources, and one of those sources is faculty members' personal paradigms and beliefs. What faculty members believe about race and diversity affects how they react and respond in a racially and ethnically diverse learning environment. These beliefs tend to fall into two major philosophical categories: the Western traditionalist position and the social progressive position.

Some scholars have also argued for four ways how cultural diversity is approached. These scholars believe that when a professor in the classroom approaches culture, there is one of four ways he/she approaches it: neutrality, similarity, diversity, and diversimilarity (Ofori-Dankwa & Lane, 2000). Ofori-Dankwa and Lane (2000) argue that faculty approach to culture has strong implications on "both content and methodology of course curriculum" (p.493). This affirms the fact that has been stated regarding why this study broadens the literature review.

#### 2.2.1 Western Traditionalist Position

In her study *Paradoxical attitudes among a college of education faculty towards ethnic diversity*, Green (1998) found faculty members at a southwestern metropolitan university did not unanimously support the idea that racial and ethnic diversity creates a better learning environment for educating American students. The professors also did not all agree that such an environment helps students learn to live as responsible citizens in a pluralistic democracy. Green's (1998) study conceptualizes the debate on racial and ethnic diversity as a continuum of perspectives whereby one end of that continuum consists of a Western traditionalist position that defends individualism and individual educational achievement and the other as a "social progressive position typified by efforts to increase inclusion and egalitarianism" (p.3).

Faculty holding Western traditionalist position attribute educational success to the individual and believe that society must not be held responsible for the "hardships" and educational needs of the individual, but that the individual's "talent and hard work are the only determinants of success" (p.5). Faculty members with this ideological proclivity see little merit in race-conscious policies, based on affirmative action, that seek to create a racially and ethnically diverse learning environment, even though some may not necessarily oppose a racially and ethnically diverse study body (Green, 1998; Rothman, Lipsett, & Nevitee, 2002). Members of such a faculty may perceive students of minority status on campus as undeserving of their educational opportunity, thus "endorsing stereotypical views of them" (Brown & Dobbins, 2004, p.159). Such a view may affect how such faculty members relate to students of minority status in the classroom, and that

that relationship may affect the performance of these students (Epps, 1995; Le Roux, 2001; Brown & Dobbins, 2004).

Brown and Dobbins's (2004) studied this relationship and the students' feelings of intellectual stigma that sometimes result. Their study shows that minority-status students often begin with favorable views of their instructors, but the students soon begin to imagine an unjust "European American instructor who would repeatedly versus never evaluate their work or an ethnically matched instructor across conditions" (p.157). Studies of the educational context show that American students of African descent report unfair treatment from European American instructors (see Brown & Dobbins, p.159).

When faculty members begin to believe that certain students do not deserve the educational opportunities they have and, as a result, begin to manifest their beliefs in words, attitudes, or behaviors, it limits the potential for effective and learning in the racially and ethnically diverse classroom. In commenting on this tendency among faculty members, Le Roux (2001) indicates that "although teacher awareness of this key injustice stretches back over more than a generation, in practices it has not lessened the negative impact of such stereotyping in culturally diverse [classroom] settings" (p.276). Most students of minority status are plagued with personal circumstances that range from lack of social and cultural capital (e.g., a lack of educated parents and mentors) to serious socio-economic problems that limit their success in school. Dealing with faculty members' negative attitudes only makes success more difficult (Epp, 1995; Le Roux, 2001; De Vita, 2001; Brown & Dobbins, 2004).

However, not all professors who hold to the Western traditionalist position have negative attitudes toward racial and ethnic diversity in the higher education context. For

example, Rothman, Lipsett, and Nevitte's (2002) study on faculty members' perceptions about the importance of diversity in higher education found that professors overwhelmingly agreed that it was important to include discussion of race and multiculturalism as part of the higher educational experience. But these same faculty members were not so predisposed to the idea of creating racially and ethnically diverse student bodies at their institutions. Mayhew's (2003) study echoes the same sentiment: "although many faculty appreciate the educational value of diversity, many are still resistant to the process of integrating related content into their course materials" (p.3).

# 2.2.2 Social Progressive Position

Even as faculty members holding the Western traditionalist position may be likely to alienate students of minority status, professors holding to beliefs based on the social progressive ideological position may bring comfort to students of minority status.

"Progressives . . . accept the egalitarian view that America has not yet attained true equality and justice. Overt aggressive acts may be less common or acceptable, but the goal are not obtained" (Green, 1998, p.6). Social progressivists believe that the promise of America remains unfulfilled as long as some of its citizens—those who have been victimized or shafted by historic racism and other circumstances not of their causing—are still lagging behind in access to opportunities such as education. As a result, a faculty member who holds to the social progressive position is more likely to be sympathetic to the plight of people of minority status, and consequently seek to address their concerns in his/her classroom. Because progressives believe that America has not yet attained true equality and justice, faculty members with such a position are more likely to seek to express their beliefs in various forms in their instructional roles. "Paradigms affect the

actions of individuals, as well as the policies of institutions, although often unconsciously" (Ofori-Dankwa & Lane, 2000, p.494). Also, "an analysis of the way a teacher's paradigm influence course content can certainly be applied to a wide range of topics within an array of disciplines, including history, philosophy, and literature" (p.494).

In summary, Green (1998) indicates that it is possible for an individual to hold both positions, to be individualistic and yet socially progressive. Green's point is that faculty members in higher education have been known to be the most liberal. Thus, belief in individualism and meritocracy may not be mutually exclusive to belief in progressive values

#### 2.3 APPROACHES TO CULTURAL DIVERSITY AS LIMITING FACTORS

Ofori-Dankwa and Lane's (2000) four approaches to cultural diversity – neutrality, similarity, diversity, and diversimilarity - serve as a valuable tool in trying to better understand various faculty members' attitudes and actions in the culturally diverse classroom. According to the authors,

Teachers using the neutrality paradigm pay little attention to cultural similarities or differences. The teachers using the similarity paradigm will tend to emphasize how cultures are alike, rather than how they differ. Conversely, teachers utilizing the diversity paradigm will place great emphasis on cultural differences, but gives only a nod and a wink to cultural similarities. Finally, the teachers using the diversimilarity paradigm will stress, equally and in appropriate measure, both cultural differences and cultural similarities. (p.493-494)

Since teachers using various cultural approaches will bring their paradigmatic positions to bear on their choices and uses of course content in the classroom (Ofori-Dankwa &

Lane, 2000), it may be assumed that how teachers choose and use course content in the racially and ethnically diverse classroom may be, to a certain degree, reflective of the paradigms they hold, because such an environment provides more opportunities for a teacher to demonstrate their beliefs and assumptions about cultural diversity. In summary, a study that seeks to know just what paradigmatic approach a teacher has to cultural diversity and how that affects what they do (Green, 1998; Ofori-Dankwa & Lane, 2000), can be assessed through an assessment of their classroom behaviors and practices — their choices and choices and uses of course content being just one area.

#### 2.4 INSTITUTIONAL GOVERNANCE AS LIMITING FACTOR

Shared governance may also be a source of dissatisfaction among faculty members and may in turn affect their attitude toward and commitment to racial and ethnic diversity. Historically, professors have shown continued displeasure with their role in institutional governance (Birnbaum, 1988, 2002; Tierney & Minor, 2002). In the mind of the faculty, institutional administration is identified with

red tape, constraints, and outside pressure that seeks to alter the institution. They come to be seen by the faculty as ever more remote from the central academic concerns that define the institution. Faculty in turn come to be seen by the administration as self-interested, unconcerned with controlling costs, and unwilling to respond to legitimate request for accountability. (Birnbaum, 1988, p.7)

This distrust between the faculty and the administration creates a disharmonious work environment that may be a source of divided priorities and goals. Because studies show that faculty members are often more loyal to departmental or disciplinary goals, professors may be less likely to support racial and ethnic diversity if it becomes an

administrative goal rather than an avowed institutional goal (Fjortoft, 1993; Gonzalez & Padilla, 1999).

One source of faculty members' displeasure is the composition of governing boards. Faculty's view of governing boards has always been that "boards of trustees were increasingly made up of businessmen whose interest was focused on efficiency and who did not understand the unique nature of the academic enterprise" (Birnbaum, 1988, p.7). This lack of knowledge of the nature of the academic enterprise, according to faculty members, impoverishes a board's understanding of the demands of teaching and scholarship. On the other hand, the board perceives faculty members as being less concerned about controlling costs and making a profit. This poor perception of each other's roles hampers working relationships (Birnbaum, 1988; 2002; Tierney & Minor, 2003). The solution recommended by boards in recent times is not viable, either. It calls for the marginalization of faculty members and the reassertion of boards' authority. The Association of Governing Boards (AGB) has indicated that they "should reiterate their ultimate responsibility and authority, explicitly clarifying who has the right to make or participate in specific kinds of decisions" (Birnbaum, 2002, p.4).

Tierney and Minor (2003) conducted a study of over 2,000 faculty members in undergraduate, masters, and doctoral degree-granting institutions across the United States on issues of shared governance. The results affirmed that faculties and administrations have different views of their roles in shared governance. On the one hand, administrations believe faculty members should be involved in shared governance in consultative and distributive decision-making roles. The consultative role places faculty in a position whereby boards decide whether faculty members' input is necessary. The

boards reserve the right to ignore the faculty members' input in the final decision-making. In the distributive decision-making role, the board allows faculty members to retain and exercise formal authority in areas such as the curriculum development, teaching, and research, and allows faculty members to assume informal authority in personnel-related matters and strategic planning. On the other hand, faculty members believe that a collegial decision-making model is needed in shared institutional governance (Clarke & Others, 1996; Birnbaum, 1988, 2002; Tierney & Minor, 2003). This model aspires to full participation of faculty members as equals in governance, and it formally extends their authority to deciding personnel issues and strategic planning.

In summary, faculty members' commitment to institutional goals and priorities may affect their commitment to racial and ethnic diversity. "It has been suggested that faculty more oriented toward the university as opposed to the department or discipline, are more instrumental in implementing the teaching and service responsibilities of the department" (Fjortoft, 1993, p.2).

#### 2.5 FACULTY DEMOGRAPHICS AS LIMITING FACTORS

When institutional reform goals align with those of the faculty, the first roadblock between consensus and action is removed, but other significant factors may still remain. Race, ethnicity, and tenure may affect faculty members' perception and commitment to racial and ethnic diversity. According to Mayhew (2003) the race of a faculty member influences his or her perception of and commitment to racial and ethnic diversity. Other studies found the same thing (Rothschild, 2003; Brown & Dobbins, 2004). Mayhew found that minority-status faculty members were more likely to include diversity-related

materials as part of their curricula than their non-minority counterparts. The study also found that female faculty members, regardless of race, were more likely to incorporate diversity-related materials into their curricula than white males.

Faculty members' commitment to racial and ethnic diversity in the higher education context is also affected by tenure and gender (Fjortoft, 1993; Milem, 2001). Tenured faculty members were more likely to show a commitment to racial and ethnic diversity than non-tenured faculty members. Female and minority faculty members were also more likely to be committed to racial and ethnic diversity, in general, than their counterparts.

In summary, faculty members' race, ethnicity, and tenure status may have a significant impact on their commitment to racial and ethnic diversity. Professors' commitment to racial and ethnic diversity is critical to their effectiveness in teaching and learning in the racially and ethnically diverse classroom (Brown & Dobbins, 2004). When faculty are committed to racial and ethnic diversity, they are likely to seek ways and employ means that maximize the benefits of racial and ethnic diversity to learning (see Gurin, Dey, Hurtado, & Gurin, 2002, 2003; Rothschild, 2003).

But there are also factors in the classroom that limit racial and ethnic diversity. These factors consist of attributes usually associated with students of minority status, namely, communication challenges due to language issues, learning style issues, and intellectual stigma that hinders academic performance.

#### 2.6 LANGUAGE ISSUES AS LIMITING FACTORS

An important characteristic of the racially and ethnically diverse classroom is that it can enrich discussions (Terenzi, Cabrera, Colbeck, Bjorklund, & Parente, 2002). As a prominent educator notes, a "classroom that does not have a significant representation from members of different races produces an impoverished discussion" (Schmidt,1998, p.A32). This claim forms one of the bases to the claims of the educational and democratic benefits of the racially and ethnically diverse higher education environment, especially the classroom (Terenzini, Cabrera, Colbeck, Bjorklund, & Parente, 2002; Gurin, Dey, Hurtado, & Gurin, 2002, 2003; Chang, Astin, & Kim, 2004). At the same time, the racially and ethnically diverse classroom often produces language problems (Adger, Christian, & Taylor, 1998; Wolfgang, 2001).

Because many students of African descent grow up speaking African-American vernacular, their capacity to effectively communicate both in verbal and written form in standard English may be limited. This limitation affects students' academic performance, because language comprehension is highly correlated to academic performance (Cadzen, 1999). In order for such students to succeed academically, they would need help and guidance from faculty members to receive the remediation they need. And when a classroom has many such students, faculty members struggle to communicate subject matter effectively. On the one hand, the burden of instructional clarity lies with the instructor. It is an important part of a faculty member's role to plan curriculum and instruction and to deliver material properly (Trigwell & Shale, 2004). Instructors are expected, as a result, to use the acceptable language as the medium to deliver that content. And by the use of the language of instruction, the instructor assumes that

communication is taking place: that content is being conveyed to students, and that students are cognitively interacting with the content by using the language of instruction. On the other hand, students with language difficulty may not grasp instructional content because they will be unable to make sense of what is being taught. Since communication is "shared meaning created among two or more people through verbal and nonverbal transaction" (Daniels & Spiker, 1994, p.27, italics in original) a particular student of minority status who is not able to respond to teaching due to language difficulty may become a casualty of a lack of communication. In such a case, learning has been diminished rather than optimized. This limitation further promotes stereotypical attitudes towards such students (Le Roux, 2001). The ultimate outcome is academic problems (Boyle, Duffy, & Dunlevy, 2003). Blake and others (1989) have concluded that such experiences by students of minority status may lead to social alienation in less supportive environments, and such a situation does not lend itself to retention. But language difficulties do not apply only to students of minority status. Immigrant students may employ different patterns of communication from the traditional student as well. For immigrant students, language difficulty occur because they are learning English as a second language. As such, they may have a limited vocabulary and be slow to speak (Sandhu, 1994, De Vita, 2001). Bilingual students "may appear slow in their communications as they have to take time to translate and re-translate from their native language to English. . . . It is important to note that many languages don't follow the same sentence structures, 'subject-verb-object' as in English' (p.13).

The recommendation Blake and others (1989) make is that institutions "create affirming climates through an asset rather than a deficit approach to students. An asset

approach seeks institutional changes that make the environment more encouraging to minority students while resolving whatever deficits they may have" (Blake & others, 1989, p.1). Even though we have seen that language barriers affect communication and therefore pose a challenge to teaching and learning, students may be able to take remedial language courses to improve their comprehension skills and, consequently, their academic performance. There are other limitations that might take more work and support not only on the student's part, but on the instructor's part as well. One of these is learning styles.

# 2.7 LEARNING STYLES AS LIMITING FACTORS

One characteristic of the racially and ethnically diverse classroom is the proliferation of learning styles/preferences (Stebbins, 1995; De Vita, 2001). This multiplicity of learning styles/preferences poses a challenge to teaching and learning that may limit its effects. Learning styles are also influenced by students' cultures (Sandhu, 1994; De Vita, 2001). According to Sandhu (1994), ignorance about these differences may result to naivety on the part of professors. Students learn differently and may learn better when they are working within their specific learning styles (Sandhu, 1994), or when faculty is cognizant of those learning styles/preferences and are compensating for them in their instructional roles. Conversely, students, especially students of minority status, may struggle in their learning if taught in a manner inconsistent with their learning styles. Thus, for faculty members to be effective in their teaching in the racially and ethnically diverse classroom, they may need to adopt different pedagogical approaches in their teaching (De Vita, 2001; Le Roux, 2001; Milem, 2001). One of those pedagogical approaches is called

active learning methods (August, Hurtado, Wimsat, & Dey, 2002; Anderson, 1994; Sandhu, 1994).

Learning styles vary in a racially and ethnically diverse classroom (Sandhu, 1994; Suleiman, 1996; De Vita, 2001). Sandhu (1994) concludes that

[p]reference for learning environments is rooted in the cultural backgrounds of the students. Traditional students, mostly from European cultures, have different preferences for learning environments than their counterparts who belong to diverse ethnic backgrounds. (p.9)

Table 2.1 outlines the comparisons he makes between traditional and minority-status students' learning preferences. It gives us an idea about what a faculty member teaching in a racially and ethnically diverse classroom context is likely to encounter. Sandhu (1994) also notes that in a diverse classroom, cultural dissonance is likely to occur, and the consequences might be counterproductive to student learning. Cultural dissonance leads to conflict, because certain infringements are made across cultural boundaries that may be acceptable by the perpetrators but unacceptable to members of other races.

Table 2.1: Differences in Learning Preferences between Diverse and Traditional Students

Diverse Students	Traditional Students		
1. Prefer cooperative learning environment	Prefer competitive learning environment		
2. Prefer group study	Prefer individual study		
3. Minimize distance when communicating	Increase distance when communicating		
4. Communicating style is informal and	Communicating style is more formal and rigid		
conversational			
5. Express emotions freely	Express emotions selectively		
6. See time as flexible and subjective	Adhere to rigid time schedules		
7. Task orientation relative to personal	Task completion takes primacy		
demands			
8. Utilize relational and affective learning	Know when analytical style is more		
styles	appropriate		
9. Seek personal relevance when processing	Process relevant or irrelevant information		
information	efficiently		

(Adapted from Sandhu, 1994)

#### Sandhu (1994) continues:

A number of barriers due to different cultural experiences can pose threats among members of various ethnic groups to create tensions, conflicts, and disharmony. In learning and teaching processes, these barriers can prove insurmountable blocks which can be detrimental to academic accomplishments of the students. . . When people from different cultural styles interact, cultural dissonance occurs. If not conscious about these differences, people from one cultural group could consider the others as arrogant, naïve, bad mannered, inconsiderate, etc. Communications breakdown, misunderstanding develops, and genuine relationships may never develop. (p.10)

In addressing learning style differences in cultures and how they relate to learning, Sandhu (1994) provides these three major premises: 1.) all students *can* learn; 2.) students learn *differently*; 3.) students learn better when they are taught in their *specific* learning styles. (p.11). Sandhu concludes with the statement that a "new and very fertile area for research is the impact of cultural differences on the learning style preferences. Initial investigations seem to suggest that cultural differences do matter in the learning styles of various ethnic groups" (p.12).

Sandhu made the above statement nearly twelve years ago. Today, because of calls to improve undergraduate education and other factors (Milem, 2001; August, Hurtado, Wimsatt, & Dey, 2002), alternative teaching methods are more commonly used, and faculty members are more likely to experiment with teaching styles other than the traditional lecture. These alternatives are considered more effective for teaching and learning because they involve students in their own learning. The use of these methods also transforms the teacher-student relationship and their respective roles. August, Hurtado, Wimsatt and Dey write:

The use of the teacher becomes that of a facilitator, which is fundamentally different from the role of the teacher as an instructor. Equally transformed is the instructor's relationship with the learner which becomes more like a partnership

whose mutual goal is student growth and learning. . . . In the role of facilitator, faculty become coaches and guides to learning; they make meaning and learn along with their students by moving away from memorization of facts to using and applying knowledge. (p.5)

These active teaching methods may also have the potential to meet the needs for teaching and learning introduced by learning styles in the racially and ethnically diverse classroom. According to Sandhu (1994), diverse students prefer collaborative learning rather than competitive learning as has been the norm in Western education. Also, Sandhu notes the relational aspects of learning for diverse students. Since their learning styles are culture-based (Sandhu, 1994; De Vitat, 2001), collaborative and facilitative teaching methods may be more suitable for teaching them.

Active teaching/learning methods also include "formally scheduled opportunities for interaction such as feedback on their academic performance and meeting with faculty during scheduled office hours, as well as informal interactions taking place outside the classroom environment" (p.20). August, Hurtado, Wimsatt, and Dey's (2002) study concludes on a positive note with regard to faculty members' perception of their use of these methods, and they indicate that "faculty believe they care about providing opportunities for student involvement and engagement" (p.25).

The 1980s and early 1990s saw calls for improvement in undergraduate higher education in the United States (August, Hurtado, Wimsat, & Dey, 2002). The underlying reason for these calls was to help the undergraduate educational system of the United States recover, as it was falling behind those of other developed nations. Some blamed affirmative action policies that helped to provide access to higher education to minorities as the source of the educational woes (August, Hurtado, Wimsat, & Dey, 2002). Whether

that claim had any merit or not, the quest to improve undergraduate education led to the exploration of new teaching methods (Sandhu, 1994; August, Hurtado, Wimsat, & Dey, 2002). According to Milem (2001), these new pedagogies, or "active forms of learning enhance student learning and development when they are used in the classroom" (p.4). Such learning methods include "cooperative learning, student presentations, group projects, experiential learning, student evaluations of others' work, independent learning projects, student-selected course topics, class discussions, student-designed learning activities, and the absence of extensive lecturing as pedagogical techniques in classrooms" (p.4). Because they appear to fit the premise that "students learn better when they are taught in their specific learning styles," (Sandhu, 1994, p.11), active learning methods do meet the needs of diverse students (De Vita, 2001).

Furthermore, this exploration and adaptation of new pedagogies to improve learning is a major shift in learning paradigm, according to August, Hurtado, Wimsatt, and Dey (2002), because the new pedagogies focus more on learning than instruction. The distinction between focusing on learning and instruction is important. Traditional methods rely heavily on lecture, making the instructor the center of attention. When professors lecture, they tend to focus on instruction. But when faculty members use active learning methods, learning becomes the focus.

Furthermore, these nontraditional methods of learning divert the focus from the instructor to the students because they should be the center of attention. It is their needs that must be met. It also modifies the instructor's role from that of a repository of knowledge that pours into the minds of passively receptive students, to the role of colearner (Sandhu, 1994; Milem, 2001; August, Hurtado, Wimsatt, & Dey, 2002). The faculty member's role shifts from being an expert to a helper, from the master to colearner.

The use of new teaching methods is not without a theoretical foundation. While some faculty members teach based on their philosophical beliefs about reality and how people learn (Soltis, 1985; Dittmar, 1992; Gutek, 1997), many professors teach based on their beliefs that certain teaching methods are more effective because people learn differently. For them, a philosophy of education must be informed and influenced by theories of learning styles (Sandhu, 1994).

# 2.7.1 Some Influences of Learning Styles Theories on Teaching

According to theories of learning styles/preferences, individuals perceive the world differently, and that individual-unique perceptive capability influences how each person learns (Davis, 1993; The Teaching Professor, 2005). "Our perceptions shape what we think, how we make decisions, and how we define what is important" (Hill, 2005, p.28). Because each person perceives the world the way it makes the most sense to him or her, scholars have different descriptions for learning styles, namely, "learning styles," "cognitive styles," "learning preferences," and "learning strategies" (see Martisen, 2003; Cassidey, 2004; Genovese, 2004). Those who particularly believe that learning styles are used strategically by individuals, define learning style as a "tendency to use the same learning strategies in various situations" (Veenman, Prins, & Verheij, 2003, p.358).

There is also a debate whether learning styles/preferences are in-born traits or whether they are products of one's environment. One possibility is that people learn to adapt to their environments by experimenting with different adjustment strategies until one works best. As long as the environment is stable, they maintain that working strategy. If the environment changes they try other strategies that work better (Martinsen, 2003; Cassidy, 2004). Studies that approach learning styles as though they are natural

tendencies (Garner, 2000; Veenman, Prins, & Verheij, 2003; Genovese, 2004; Hill, 2005) most often rule this theory out. Cassidy (2004) writes:

The "state-or-trait" debate associated with so many human psychological characteristics . . . is, not surprisingly, relevant here. Learning style may be considered as stable over time . . . or as changing with each experience or situation. Perhaps the more workable view is that a style may well exist in some form, that it may have structure, but that the structure is, to some degree, responsive to experiences and the demands of the situation . . . to allow change and to enable adaptive behavior. (p.421)

Authors that use the term "learning preferences" or "learning strategies" to describe learning styles may have good reason to. A preference is based on a willful choice. The term "learning preferences" assumes the existence of a variety of choices among which the individual makes a deliberate choice of one or more preferences. It further means that the individual has found the most suitable preferences to meet his or her need.

There is also a limited line of research on learning styles that suggests two approaches to learning, *deep* and *surface* learning. Martinsen (2003) writes:

A student with a deep approach has an intention to understand the learning material and is motivated by an interest in the subject matter. Use of evidence and the relating of ideas are the predominant strategies. These strategies reflect operation and comprehension respectively. In contrast, a surface approach refers to the intension to reproduce the learning material. Surface approach is related to different forms of rote learning, with fear of failure as the predominant motive. Instead of restructuring the learning material, the surface learner will adopt the structure already presented by learning the sign, rather than what is signified by the sign. (p.196)

These two ways of learning are rightfully called approaches because they are basically techniques that all students use from time to time. The deep learner is likely to use the surface learning method if it will serve him or her well in a particular situation. For example, studying for a standardized test for which a deep learner may not have adequate

time for preparation is likely to lead to surface learning technique or rote learning (e.g., memorization of useful information).

"Deep learning" and "surface learning" may sound new, but they are techniques that all students use from time to time. The deep learner is interested in the subject matter, according to Martinsen, and increases the amount of time-on-task on the particular subject matter or coursework (Astin, 1993). This leads to mastery of the subject matter and excellent performance in the particular course. The faculty member teaching the course is pleased with the student and calls the student "good." Not surprisingly, however, every faculty member desires that all students would be good students. In other words, faculty members believe that students should be "deep" learners consistently across every course they take. Similarly, all parents desire the same for their children when they send them to college. Unfortunately, not all students turn out to be "deep" learners (Moore, 2004). Some students are "deep" learners in one course, and are not in other courses. Rather, and perhaps due to lack of interest or degree of difficulty, some students are "surface" learners in some courses. However, for purposes of this study, Anderson's (1989) "Culture-based Preferences for Learning Environments" have been adopted.

# 2.7.2 Culture-based Preferences for Learning Environments

According to Anderson (1989), learning environment preference is culturally-based, and impacts teaching and learning (Stebbins, 1995). Students from ethnic backgrounds (e.g., diverse minority status students) prefer a more cooperative learning environment, while traditional students (e.g., students from European-American backgrounds) prefer a competitive learning environment. However, "observers and critics of education have

long noted that competitive classroom environments do not promote learning for all students equally..." (McGroarty, 1989, p.58). Furthermore, ethnic students prefer group study, while their European-American counterparts prefer individual study. Ethnic students utilize affective and relational learning styles, while European-American students know when analytical style is more appropriate. Ethnic students prefer to seek and process information based on personal relevance, while European-American students are non-discriminating in choosing and processing information (see Sandhu, 1994, p.8). These preferred learning environments and learning styles used by diverse students may be significant to their abilities to respond to teaching environments that focus exclusively on a traditional western style of teaching such as the lecture method. De Vita's (2001) study shows that learning styles are culturally-based, supporting Anderson's (1989) study. But De Vita's study also shows that in a racially and ethnically diverse environment, there is a multiplicity of learning styles.

Furthermore, studies show that attempts to improve undergraduate education have led to the use of active learning methods, which are preferred by diverse students (August, Hurtado, Wimsatt, & Dey, 2002). These methods are said to be effective for student learning. According to De Vita's (2001) study of learning styles among diverse students, faculty members teaching in diverse educational contexts must pay attention to learning style differences. Since the multiplicity of learning styles may be a limiting factor for effective learning in racially and ethnically diverse classrooms (De Vita, 2001; Le Roux, 2001; Wolfgang, 2001), detecting it and responding with the right teaching methods may optimize learning instead. It can therefore be assumed that faculty members who teach in such contexts and are aware of learning environment preferences or

methods, are more likely to adopt different teaching methods, if they are keen on improving student learning.

Finally, even though active learning methods such as collaborative learning, etc. are preferred by ethnically diverse students (Anderson, 1989; Sandhu, 1994), they are most effective in many non-culturally based learning situations. In graduate school, students are encouraged to become part of learning communities whose activities are based on collaborative learning. In science and other learning situations, teachers encourage their students to learn to solve problems together through interactions and questioning (Svinicki, 1990). These methods of learning are theory-based. Svinicki writes:

Most of the collaborative learning vines are deeply rooted in experiential learning and student-centered instruction, the major proponents of which in this century have been philosopher John Dewey and cognitive psychologists Jean Piaget and L.S. Vygotsky. The struggled to understand can help learners deal with the tension between what students already know.... (p.21)

Thus, as faculty members teach in racially and ethnically diverse educational contexts, they are expected to develop context knowledge of the setting to enable them to know and appreciate the challenges they face (Trigwell & Shale, 2004). As they do so, the realization that students of minority status prefer certain learning environments and styles will be evident. For those faculty members who are concerned about being effective and optimizing learning, introducing active teaching methods is likely to become a ready response (Sandhu, 1994; De Vita, 2001; Le Roux, 2001; August, Hurtado, Wimsatt, & Dey, 2002).

#### 2.8 INTELLECTUAL STIGMA AS LIMITING FACTOR

Social stigma is one of many impediments that affect the performance of students of minority status (Chavous et al., 2004). These students may worry that they will be stereotyped by their white peers and their teachers. Brown and Dobbins (2004) write:

Stigma (i.e., these concerns about being stereotyped) can impact both the experience of oneself and one's performance in the stereotyped domain. For example, when students of color envision an evaluative interaction with a European American teaching assistant (TA), their expectations regarding how they would feel in class are less positive than when they imagine interacting with an ethnically matched TA or imagine a non-evaluative interaction with a TA. Moreover, African American students perform worse when told a difficult test is diagnostic of their intellectual ability than either when told the test is not diagnostic of their intellectual ability or when told the test is particularly challenging. (p.158)

Brown and Dobbins (2004) also believe that performance deficits demonstrated by American students of African descent on tests conducted by European American TAs, or when they learn that their intelligence is being assessed, are a result of being concerned that they might be stereotyped. Hispanic students also perceive their teachers as exhibiting bias. As a result of this lack of trust in their teachers, students of minority status desire teachers from their own race over European American (Brown, Dobbins, 2004). While a racially and ethnically diverse classroom provides opportunities for learning about other cultures, values, and viewpoints and leads to a better democratic education (Gurin, Dey, Hurtado, & Gurin, 2002, 2003; Chang, Astin, & Kim, 2004), Brown and Dobbins (2004) find that "contexts in which stereotypes are salient may detrimentally affect the performance of students of color as well as their expectations for their experience in the classroom" (p.158).

The problem of stigma makes the racially and ethnically diverse classroom even more necessary, as it provides challenges as well as opportunities. According to Antonio et al. (2004), these challenges involve intrapersonal and interpersonal issues, stigma being one of them. As majority students professors examine their own stereotypes and prejudices begin to confront them as a result of better knowledge gained from interacting across racial and ethnic boundaries (Gurin, Dey, Hurtado, 2002, 2003; Antonio et al., 2004; Chang, Astin, & Kim, 2004), they may also confront thoughts of being stereotyped (Brown & Dobbins, 2004), thus helping them to correct old behaviors and adopt new ones.

But the racially and ethnically diverse classroom can also create tension, isolation, and negativity if not properly managed. By itself the racially and ethnically diverse classroom will not produce the positive outcomes of which it is capable (Chang, 2003). In fact, it is for these possibilities in generating divergent thinking that makes it attractive for the development of educational and democratic outcomes (Gurin, Dey, Hurtado, & Gurin, 2002, 2003). To defeat or minimize negative intellectual stereotypes, which is one of the key limiting factors to the academic performance of students of minority status, and to further enhance the consistency of their performance, American students of African descent must learn to respond differently to stereotypes and prejudice. According to Epps (1995), "The interplay of 'white treatments' of African Americans in economic, political, social, and educational spheres, and African Americans' responses to those treatments, is the real cause of the persistence of racial inequality" (p.600). American students of African descent may not be able to prevent every other race from stereotyping them, but they can control their own response and reactions. By accepting and affirming

who they truly are, they may be able to overcome the effects of stigma. For faculty members in the racially and ethnically diverse classroom, understanding this need of African American students aids them in their efforts to teach minority students,.

#### 2.9 INSTITUTIONAL CLIMATE AS LIMITING FACTOR

Institutional climate plays a critical role on how faculty members perceive the viability of their commitment to enacting racial and ethnic diversity. By definition, institutional climate has four key components: a historical legacy of inclusion or exclusion, structural diversity, psychological climate, and behavioral climate (Hurtado, Milem, Clayton-Pedersen & Allen, 1999). With an institution's historical legacy of inclusion or exclusion, two things are possible. On the one hand, if an institution has a legacy of inclusion, it is likely to attract students of minority status. But if an institution has a legacy of exclusion, it will repel minority status students. Hurtado, Milem, Clayton-Pedersen, and Allen (1999) write:

Researchers have found that success often depends on an institution's initial response to the entrance of diverse students and its early establishment of programs to accommodate them; moreover, the response affects or is affected by the institutional philosophy regarding the college's responsibility for educating students of color, its commitment to affirmative action, its intent to offer minority-specific programs, and its attention to the psychological climate and intergroup relations on campus once substantial numbers of students of color are admitted. (p.9)

This institutional attitude or orientation affects not only how students perceive the institution, but how faculty members react as well. In a study conducted at a school of medicine in the United States, Price et al (2004) found that

Minority and majority faculty agree that ethnic differences in prior educational opportunities lead to disparities in exposure to career options, and qualifications

for a subsequent recruitment to training programs and faculty positions. Minority faculty also describe structural barriers . . . that hinder their success and professional satisfaction after recruitment. (p.565)

This negative perception by minority-status faculty members of the institution's past racial performance affected the views of the institution's current professors. Minority-status faculty members saw "structural barriers" that hinder success. However, according to Price et al. (2004), when university leadership learned the results of the study, it took steps to address the problem. While the study does not explore how the remedial efforts affected faculty members' perspectives, it is assumed that faculty perceptions of the institution improved after the administration took corrective steps.

One of the major steps the university took was the enhancement of structural diversity. It enrolled more medical students of minority status (Hurtado, Milem, Clayton-Pedersen & Allen, 1999; Gurin, Dey, Hurtado, & Gurin, 2002, 2003; Chang, Astin, & Kim, 2004; Chang, 2005). Structural diversity is regarded as the first critical step an institution must take in diversifying its educational environment. When minority status students are in large numbers, they are more likely to relate to each other and not feel isolated and alienated, or experience a sense of being tokens. Tokenism occurs when a limited number of students are forced to represent their racial and ethnic groups within a majority racial group context (Hurtado et al, 1999). "Tokenism contributes to heightened visibility of the underrepresented group, exaggeration of differences among groups, and the distortion of individuals' images to fit existing stereotypes" (p.19). This phenomenon creates an uncomfortable social climate for students of minority status.

Also, faculty members' perceptions of an institution's commitment to racial and ethnic diversity decline when the institution is unable to achieve structural diversity

(Gonzalez & Padilla, 1999). If faculty members perceive that the institution is not committed to racial and ethnic diversity, they are less likely to express commitment to it themselves (Schulte et al, 2001). Studies show that many institutions espouse their commitment to racial and ethnic diversity (Gudeman, 2000; Rothman, Lipsett, & Nevitte, 2002) but their student bodies and faculties remain demographically unchanged. An institution cannot claim a commitment to racial and ethnic diversity if it does not back that rhetoric with action.

Furthermore, higher education leaders who believe in creating a racially and ethnically diverse student body need to begin with the faculty, because an institution's ability to recruit and enroll minority status students may be dependent to a certain degree on the diversity of its faculty. Hurtado, Milem, Clayton-Pedersen, and Allen (1999) write:

Faculty of color are able to provide support that benefits students from their particular groups. Students of color are likely to seek out faculty "who are like them" and whom they believe will understand them and the experiences that they are going through as students, greatly reducing their feelings of loneliness, alienation, and isolation as students of color. (p.22)

It should not be difficult, therefore, to argue that if an institution is committed to racial and ethnic diversity, it is more likely to have a proclivity toward recruiting faculty members of minority status (Smith, 1989). In fact, one may hypothesize that an institution's commitment to creating a racially and ethnically diverse student body is evident by its commitment to recruiting minority-status faculty members. Inversely, an institution's unwillingness to recruit faculty members of minority status is indicative of its lack of commitment to racial and ethnic diversity in its student body. Smith (1989) writes: "Transformation of the institution into a system that is organized for diversity means addressing a number of issues, including faculty and staff diversity" (p.1). Blake

and others (1989) discuss the need for a "critical mass" of minority-status faculty members. Thus, if faculty members sense little or no effort in recruiting professors that can meet the needs of a diverse student body, they may see it as a lack of commitment professors to the idea of diversity. As a result, faculty members may lack the commitment they would otherwise have, as suggested by Blake and others (1989). But institutional climate is not limited to an institution's legacy of inclusion or exclusion and structural diversity alone; there are the psychological and behavioral dimensions.

The psychological dimension of institutional climate pertains to how people view the web of interactions and relationships within the social environment in the institution. Studies show that "racially and ethnically diverse administrators, students, and faculty tend to view the campus climate differently" (Hurtado, et al, 1999, p.25). For example, one study showed that 28 percent of African American students affirmed institutional commitment to racial and ethnic diversity, while 68 percent of white students in the same student body indicated that the same institution was committed to racial and ethnic diversity. These differences in perceptions or perspectives may affect students' attitudes and behavior. Studies of African American, Hispanic, and Native American students' perceptions of institutional climate have revealed that those perceptions have been primarily based on experiences they have had (see Hurtado, et al., 1999, p.25-28). For faculty members, what they see and experience within the environment serve as the barometers and thermometers they use to measure quality of institutional commitment to diversity, the viability of the diversity program, and determine whether they should commit to it (Gonzalez & Padilla, 1999). The administration can take one of two approaches to improve the psychological climate: an asset approach or a deficit approach. According to Blake and others (1989), "the asset approach seeks those institutional changes that make the environment more encouraging to minority students while resolving whatever deficits they may have" (p.23). The deficit approach only focuses on the lacks in the environment, mainly a dwelling on negativism. The first approach enhances and facilitates the realization of goals, while the second approach undermines success.

The behavioral dimension encompasses real action taking place within the environment: "actual reports of general social interaction, interaction between and among individuals from different racial/ethnic backgrounds, and the nature of relations between and among group on campus" (Hurtado, et al, 1999, p.37). Studies show that students get as much out of college as they are willing to put into it (see Pascarella & Terenzi, 1991; Astin, 1993; Weidman & Stein, 2003). The behavioral climate determines whether students integrate into the academic community or do not. The actions and behaviors that students decide to get involved in may help their integration or hamper it (Hurtado, et al, 1999). As Pascarella and Terenzi (1991) have indicated, students' peers, faculty members, and other institutional activities play a significant role in their integration. Interacting with peers and studying together helps students to integrate in a racially and ethnically diverse environment (Chang, Astin, & Kim, 2004). Reinforcements by faculty members of students' learning through interaction are critical for some minority students (Hurtado, et al, 1999).

The four dimensions of institutional climate—the historical legacy of inclusion or exclusion, structural diversity, psychological, and behavioral—help to construct the institutional climate. Their combined effect can promote, facilitate, or inhabit minority

status students' well being. Faculty members' perceptions can be formed by it for better or for worse. Since perception is related to commitment (Lawrence, 2005), how faculty members react to racial and ethnic diversity in the classroom may be affected by institutional climate (Clark and Others, 1996; Milem, 2001). This is particularly true, according to Milem (2001), when faculty members are pleased with their role in institutional governance.

#### 2.10 ACADEMIC QUALITY CONCERNS AS LIMITING FACTORS

Another issue of profound importance to educators as they try to create racial and ethnic diversity in the classroom is academic quality. Because African American and Hispanic students historically performed poorly on standardized tests, and because their dropout rates are consistently higher than those of their White peers, some fear that increasing the racial and ethnic diversity of a student body would lower academic quality (Richardson & Skinner, 1990; Astin, 1992; Lawrence, 2005). This claim may not be completely factual. It is only true when needed interventions for maintaining academic quality are ignored or precluded. According to Richard and Skinner (1990), "open access" institutions may successfully increase racial and ethnic diversity in their student bodies provided they are willing to implement interventions that would maintain academic quality. Academic quality may fall only if "open access" institutions try to increase racial and ethnic diversity without formulating and implementing the necessary interventions. Richardson and Skinner (1990) argue that selective institutions need not worry about lowering academic quality, but "open access" institutions ought to be concerned about it.

The Richardson-Skinner model recommends interventions that must be implemented within three areas of institutional leadership: campus administration, student affairs, and academic affairs. Campus administration is responsible to set goals and priorities, gather information, allocate resources, and coordinate and control the process. Student affairs must conduct outreach, recruit students, provide financial aid to needy students, admit students, help with orientation and transition, provide mentoring and advising, do assessment and provide for remediation, and provide for learning assistance. Finally, academic affairs must devise achievement strategies, recruit the necessary faculty members and provide for their tenure, provide incentives and rewards, and reform the curriculum.

Implementing these interventions requires an institution-wide effort and commitment. Few institutions have shown the willingness to commit to the undertaking; this is not surprising given the high level of rhetoric and limited commitment level in higher education (Astin, 1992; Rothman, Lipsett, & Nevitte, 2002; Moore, 2004). Implementing the Richardson-Skinner model for racial and ethnic diversity shows challenges that are limiting factors to the enactment of racial and ethnic diversity. Maruyama and Moreno's (2000) conclusion that faculty members did not believe that racial and ethnic diversity had any negative impact on academic quality was correct given the context of their study: They examined research universities that had lower levels of racial and ethnic diversity because of their selective nature. The study by Maruyama and Moreno did fulfill its purpose, in that it was intended to determine faculty perceptions about the impact of racial and ethnic diversity, as well as the commitment levels of those universities to racial and ethnic diversity. Even though their research revealed that faculty

thought racial and ethnic diversity had no negative affects on academic quality, based on the fact that Research I universities do not have racially and ethnically diverse student bodies, a better assessment of academic quality must be done in racially and ethnically diverse environments. Such a study should account for possible interventions, or their lack thereof, as controlling factors of study results. A careful review of the literature on race finds that while the racially and ethnically diverse classroom has great benefits for learning, diversity is difficult to implement and may affect the maintenance or achievement of academic quality. The proliferation of learning styles in the racially and ethnically diverse classroom (De Vita, 2001; Le Roux, 2001), the issue of language challenges (Wolfgang, 2001), the presence of prejudice and stereotypes, and the presence of intellectual stigma among students of minority status based on prejudice and stereotypes from European American students and some teachers (Rothschild, 2003; Brown & Dobbins, 2004) are proof of that reality. There is another challenge other than those already identified: the external environment.

#### 2.11 EXTERNAL ENVIRONMENT AS LIMITING FACTOR

The external environment consists of forces outside of the institution. These may include federal and state government policies, constituents such as alumni and donors, concerned parents, and other sources of support and opposition to racial and ethnic diversity. The ability and willingness of the federal government to encourage or discourage racial and ethnic diversity is the strongest of the external forces (Patterson, 2001; Woodhouse, 2002). The history of the United States shows that sometimes public policies must be

enacted at both the state and federal levels before people of minority status—citizens of the United States—are able to enjoy their constitutional rights. But when roadblocks are not removed, regardless of what form they take, they limit and inhibit, making it difficult for institutions to create racial and ethnic diversity.

As a limiter of racial and ethnic diversity, racial segregation has been one of the most powerful limiting forces to appear on the American social landscape. Except for Native Americans, Americans of African descent is the oldest minority group. Because of slavery, Americans of African descent could not claim rights to citizenship until the ratification of the Fourteen Amendment in 1868. Thereafter, the southern states were pressured by the federal government to comply with the stipulations of the Fourteen Amendment (Newcomer, 1959). Determined to maintain a society of privilege for whites, many of the southern states formulated "black codes" to prevent Americans of African decent from entering certain occupations, including the judiciary. Because of intimidation tactics by groups such as the Ku Klux Klan, which made Americans of African descent fear for their lives, federal authorities passed laws segregating public facilities. For example, in 1896 (*Plessy v. Ferguson*), the U.S. Supreme Court ruled to establish the "separate but equal" doctrine that stated that Americans of African descent and European Americans were equal, according to the Fourteen Amendment, but that equality did not mean the sharing of public facilities such as schools. Segregationists used this ruling as justification for racist practices in public places and schools. By passing the segregation laws the federal government reneged on its responsibility to protect the most vulnerable of its citizens against harassment and violence. This failure further emboldened the perpetrators. Americans of African descent thus had two enemies: acts of violence from

American citizens and unjust laws passed by their government. It was, indeed, a challenge that could only be overcome by federal intervention. As Chief Justice Warren said, segregation was "evidence of the formidable edifice of racial discrimination in the United States" (Patterson, 2001, p.xiii).

## 2.11.1 Brown v. Board of Education of Topeka (1954)

Brown v. Board of Education brought down the edifice of racial segregation and discrimination in the United States. This unanimous ruling by the U.S. Supreme Court to desegregate public facilities and schools may be the single greatest act of courage in America since the Emancipation Proclamation. Patterson (2001) writes: "Many contemporaries agreed that the Court had courageously contested America's durable color line" (p.xiii).

As the guardian, trustee, and protector or last arbiter of the rights and hopes of the American people, the U.S. Supreme Court undid what it had done 88 years earlier in *Plessy v. Ferguson*. It removed the shackles it had placed on the freedoms and rights of Americans of African descent. But the high court's ruling did not go uncontested. The ruling was denounced by many, including congressmen and judges. Some named May 17, 1954, the day the ruling was made, Black Monday. To the delight of *Brown*'s critics, *de jure* segregation continued to prevail in the better part of the south, while *de facto* segregation flourished in the north through housing and schooling. *De jure* segregation is legalized segregation. *De facto* segregation is not written as laws but evident in practice and experienced by victims in their daily lives. At the state level government officials made decisions that made plain their intention to undermine or derail desegregation.

These decisions were evident in public policies such as "zoning, establishment of school

bus route, sitting of new schools, and drawing of school district lines" (p.xx). These practices, left unchallenged, would only persist.

# 2.11.2 The Civil Rights Movement

Americans of African descent and their white American allies challenged their society to implement the ruling of *Brown v. Board of Education* in daily life. They accomplished this through boycotts, sit-ins, freedom rides, and demonstrations that jolted Congress to produce two historic pieces of legislation, the Civil Rights Act of 1964 and the Voting Rights Act of 1965. The Elementary and Secondary Education Act, passed in 1965, threatened to cut federal assistance from any school that practiced *de jure* segregation. The next several years following the signing of these bills saw bloody riots in many cities across the nation (Petersen, 2001). Fear gripped the nation as some civil rights leaders, such as those of the Black Power movement, called for violence. This caused a split in the movement.

The judiciary branch of the federal government had, in *Brown v. Board of Education*, initiated the civil rights movement, as its ruling served as the basis for the movement. The legislative branch of the federal government had passed, although under pressure, the Civil Rights Act of 1964, the Voting Rights Act of 1965, and the Elementary and Secondary Act of 1965 to assure that the benefits of the high court's decision were realized. In the mid-60s, "President Lyndon B. Johnson signed several executive orders, creating a triangle of complete federal support for civil rights. The action of the president was intended to remove barriers that had prevented minorities from being hired by federal contractors, and enabling miniorities to participate in other aspects of American life" (Maruyama , Moreno, Gudeman, Harvey, & Marin, 2000, p.1).

## 2.11.3 Access to Higher Education

By the early 1970s, there was a spike in the minority-status student population. Between 1966 and 1977, the number of students of Americans of African descent tripled (Hossler, Braxton, & Coopersmith, 1996). The impact of Brown v. Board of Education was being felt throughout the American educational system, as were the effects of the civil rights movement and the three federal acts were having an impact. Elite institutions of higher education were opening their doors to students of minority status because of affirmative action. The intent of affirmative action was to remove hurdles that had historically prevented certain groups in American society from having access to certain opportunities. A new day for Americans of African descent and other groups of minority status had dawned, but, indeed, the culture of institutionalized racism—manifested in de facto segregation, discrimination, and hate crimes even today—would not easily cede defeat. Opposition continued to federal desegregation and integration efforts. And the rise of the conservative American political philosophy in the late 60s further undermined affirmative action principles and practices (Patterson, 2001). But by the mid-70s, many leaders in higher education had taken the baton and were leading the charge for access and equity in the academy. In response to their critics, these leaders advanced many rationales for their support of racial and ethnic diversity.

# 2.11.4 Support and Opposition in the Courts

The role of the judiciary in settling conflicts within a democratic system of government is one of the most important aspects of such a system. Since the affirmative action era, there have been significant number of lawsuits assailing race-sensitive admissions policies at selective universities (DeFunis v. Odegaard, 1974; Bakke v. University of California,

1978; Hopwood v. University of Texas, 1996; Gratz v. Bollinger et al., 2003; Grutter v. Bollinger et al., 2003). These suits alleged that race-sensitive admission violates the Fourteenth Amendment, denying a group of citizens their civil rights, and that the practice is wrong on its merits. The first of these cases is *Bakke v. University of California* (1978).

Bakke v. University of California: The Diversity Rationale. This case is the first of only three cases to be taken and fully addressed by the U.S. Supreme Court in the affirmative action era. Four years prior to this case, however, the Supreme Court did take a case in DeFunis v. Odegaard (1974) in which DeFunis was denied admission to the University of Washing Law School. DeFunis had better tests scores than some students of minority status who were admitted instead of him. However, the Supreme Court did not decide the case until DeFunis' last year at the university, after he successfully appealed to a trial court that forced the university to admit him. The high court reversed the trial court's decision, but the case was moot, because as the Supreme Court argued, the university had already admitted DeFunis. Thus, when Bakke v. University of California (1978) was before the Supreme Court, there was no stare decisis (or precedent), with which the court could work. It was a difficult case, and the court's decision remains one of the most debated of current higher education laws. Here are the facts of the case, as they are known.

The medical school of the University of California at Davis had seats for 100 students in 1971. At the school's opening in 1968, there were only 50 seats. The first class had three Asians, no African American students, no Hispanic Americans, and no Native Americans. In the two years following the school's inception, a special admissions

program was designed by the faculty to increase the representation of students of minority status, particularly the underprivileged. According to the general admission criteria, prospective students with grade point averages (GPAs) below 2.5 were rejected. Factored into the admissions criteria were an interview, cumulative GPA, GPA in science courses, the Medical College Admissions Test (MCAT), letters of recommendation, extra curricular activities, and biographical data. Each candidate was rated on a scale of 1 to 100 points. The scores from the admission criteria were added to obtain the candidate's final score. Student who classified themselves under the category of "economically and/or educationally disadvantage" on the 1973 application form, or as a member of "minority group" on the 1974 form, had their applications forwarded to the special admissions committee chairman, where an evaluation was made for admission and the top choices were submitted to the general admissions committee for consideration.

In 1974, the medical school received 3,737 applications for these 100 seats. From 1971 to 1974 the medical school admitted 60 students of minority status: 12 Asians, 21 African Americans, and 30 Hispanic Americans (see Table 2.2 below).

Table 2.2 University of California Medical School at Davis Minority Enrollment (1970-1974)

Year	Blacks	Hispanics	Asians	Total
1970	5	3	0	8
1971	4	9	2	15
1972	5	6	5	16
1973	6	8	2	16
1974	6	7	3	16

However, in 1974, Allan Bakke completed his application and earned a total score of 94. Even though his mark was higher than some students admitted, Bakke's interviewer, Dr. Lowrey, found him limited in his answers. According to Dr. Lowrey,

Bakke used his personal opinions to answer questions rather than knowledge of the total problem. Bakke was denied admission, and he sued the school in the Supreme Court of California. The case was based on the premise that he was excluded from admission to the medical school based on his race, which is a violation of the equal protection clause of the Fourteenth Amendment and of Title VI of the Civil Rights of 1964. The California court ruled that race could not be used in admission decisions; therefore, Allan Bakke must be enrolled. The case was appealed to the U.S. Supreme Court, which upheld that part of the lower court's decision. However, the U.S. Supreme Court struck down the lower court's contention that race could not be used in admission decisions. In a 5 to 4 decision, the U. S. Supreme Court ruled that the use of race as one of several admission criteria is permissible. Justice Lewis Powell wrote the defining opinion, which stated that an institution must have a compelling interest to use race as an admission factor and the policy must be narrowly tailored to meet the intended purpose. Futhermore, the court decided that admissions policies based on quotas or set-asides were unconstitutional (Marquez, 2002). This judgment provides the diversity rationale that higher education institutions have used to create racial and ethnic diversity in their student bodies (Hopwood v. University of Texas, 1996; Gratz v. Bollinger et al., 2003; Grutter v. Bollinger, et al., 2003). However, this ruling introduced a new set of problems: The single most difficult problem with the court's decision is that it does not lay out clear parameters, such as defining what it means by "narrowly tailored," within which institutions may operate. Thus, higher education institutions know that considering race is permissible as one of many admission criteria, but they have found it difficult to narrowly tailor race-conscious admission policies to satisfy the requirement (Schmidt, 2003). As a

result, instead of *Bakke* providing relief and support for educators' actions in formulating race-conscious admissions policies, it has become a tool opponents have used to undermine such policies. This is a challenge with which any institution that is determined to racially and ethnically diversify its student body must contend.

The 1990s saw a plethora of assaults affirmative action across the nation, and, quite recently, two more landmark cases went to the Supreme Court, Gratz v. Bollinger et al. and Grutter v. Bollinger et al. These cases were significant but did not completely resolve questions on what it really means for a race-conscious policy to be "narrowly tailored." This is the same approach members of the Supreme Court took in *Bakke v*. University of California (1978) when they refused to consider and address the question. The question remains: How do educators "narrowly tailor" race-conscious admissions policies? Educators have been unable to answer the question for nearly 27 years, and they not be able to answer it in next 27. An example of the difficulty with answering the question is evident in the Supreme Court's ruling in Grutter v. Bollinger et al. The University of Michigan won the case because, according to the Supreme Court, it had narrowly tailored its law school admission policy. But the university does not know how that policy differs from its undergraduate admission policy. While accepting and celebrating its victory in Grutter v. Bollinger et al., the university went away wondering what it could and could not do. No definitive answer has arisen to date. It is possible that educators' inability to answer this question led to the affirmative action lawsuits of the 1990s, including Proposition 209 in California in 1995, and Hopwood v. University of *Texas* in 1996.

California, one of the states that have banned affirmative action practices in higher education, began to see increased intolerance of affirmative action practices in the early 1990s. By late 1995, the University of California's board of regents decided to eliminate affirmative action in admissions practices and faculty recruitment, based on a proposal written by U.C. regent Ward Connerly on May 3, 1995 (Santiago, 1996). The proposal was titled, "Elimination of Race-Based Financial Aid." In 1996 California voters passed Proposition 209, eliminating affirmative action practices at the state level (Marquez, 2002). California is one of the most racially and ethnically diverse states in the union, making Proposition 209 a bold step. By-standers wondered about its nationwide consequences. Also, California's system of education led to the diversity rationale introduced in Bakke v. University of California (1978). The proposition thus raised questions among proponents of racial and ethnic diversity who had come to rely heavily on the diversity rationale for their efforts. What educators had feared soon became a reality when the University of Texas' race-conscious admissions policy was challenged in Hopwood v. University of Texas (1996). Santiago (1996) writes:

When the Supreme Court opted not to hear the Hopwood v. University of Texas case, which states that race can no longer be considered for college admission, it rendered Affirmative Action, if not dead, certainly terminally ill and with time quickly running out. Affirmative Action is under attack not because the majority of Americans are against it but because conservative critics have effectively distorted its definition. (p.18)

Hopwood v. University of Texas constituted the first major assault on the diversity rationale produced by the Supreme Court's decision in Bakke v. University of California (1978). It also challenged the constitutionality of the decision itself. In Hopwood v. University of Texas, the Fifth Circuit Court ruled that the university's admission policies

were unconstitutional. When the case was appealed to the U.S. Supreme Court, the high court refused to hear the case (Santiago, 1996; Springer, 2003). In fact, the U.S. Supreme Court, for reasons unknown, had refused to hear cases of this nature from 1978 and 2002. Here are the facts of the case as they are known.

Cheryl Hopwood applied for admission at the law school of the University of Texas in 1992 and was rejected, even though she had a grade point average (GPA) of 3.8 and an LSAT score of 38. Texas used a formula called T1 for computing an applicant's eligibility score. Cheryl earned a T1 score of 199, which was higher than the required T1 score of 189 for students of minority status. Because of the ruling in this case, the then Texas attorney general enacted a restriction to prevent colleges and universities in Texas from offering financial aid based on race. However, in 1997 the new Texas attorney general withdrew the restriction. Of the higher education affirmative action cases decided in the 1990s, there were none greater than the University of Michigan cases, because those two drew new attention to *Bakke v. University of California* (1978), and reconstituted the its language.

Gratz v. Bollinger et al and Grutter v. Bollinger et al. (1997-2003) constitute two affirmative action lawsuits that were brought against the University of Michigan in 1997, one concerning its undergraduate program and the other against its law school. The undergraduate lawsuit was filed by Jennifer Gratz, and the law school suit was filed by Barbara Grutter. These were two prospective students whose applications were denied respectively. Both litigants accused the university of using two standards for admission: one standard for students of minority status and another for white students (Springer, 2003). In December 2000, Judge Duggan of the U.S. District Court for the eastern district

of Michigan ruled that the university's use of race as a "plus factor" in its admission policy was constitutional in *Gratz v. Bollinger et al.* The judge declared that the policy passed the strict scrutiny test: The university had a compelling interest in creating the policy and had narrowly tailored it to address that interest (Idelson, 1995; Springer, 2003). The court's decision was appealed to the Sixth Circuit Court of Appeals, but before the Sixth Circuit Court could rule, the litigants used Rule 11 *Writ of Certiorari* to seek a decision from the U.S. Supreme Court. A Rule 11 *Writ of Certiorari* enables litigants to leap-frog a case in a lower court to a higher court. The Sixth Circuit Court, however, ruled in a 5-4 decision in favor of the university in the *Grutter v. Bollinger et al.* case on May, 14, 2002.

The U.S. Supreme Court granted the *writ of certiorari* to hear the cases on December 2, 2002. Oral arguments were held on April 1, 2003, and the high court ruled on June 23. The ruling in *Grutter v. Bollinger et al.* was that the university's law school admissions policy was narrowly tailored to meet a compelling interest, thus passing the strict scrutiny test (Supreme Court Cases, 2000–present, 2003). The ruling in *Gratz v. Bollinger et al.* was not as favorable to the university. The court ruled that the university's undergraduate admission policy did not pass the strict scrutiny test. As a result of this later ruling, the university has restructured its undergraduate admission policy. Now the university grants points for academic qualifications and non-academic qualifications.

Smith v. University of Washington (1997), another lawsuit, was filed by a female (Smith) against the University of Washington for declining to admit her and instead admitting less-qualified minority students. In November 1998, while Smith's suit was

pending, voters in Washington approved an ballot initiative that banned affirmative action policies and practices (Springer, 2003). Before a ruling was made in the case, the university announced that it was taking steps to remove affirmative action policies from its admission process. The district court then decided that the case was moot and did not proceed with it.

University of Georgia cases constitute the higher number of all affirmative action cases brought against any American higher education institution in the continental United States. The cases can be summarized as Wooden, Tracy, Bratcher, Harris, Jarvis, Davis and Green, Johnson v. University of Georgia. Some of these cases have been consolidated, and others were separated and reconsidered (Springer, 2003). They range from undergraduate admission denial suits to law school-related suits. Unlike other universities that have faced affirmative action lawsuits, the University of Georgia has three historically black public institutions that have, in part, struggled to prevent what is termed "meaningful desegregation" (p.8). The plaintiffs have, rather than identifying these institutions in their lawsuits, dropped the racial identifiably. Some critics have called some of these lawsuits intentional assaults on the system of education.

In 1999, other less known cases were filed. A coalition of civil rights organizations in California brought a class action lawsuit against the University of California at Berkeley for denying admission to qualified students of minority status. The university provides advanced placement courses unevenly across the state. Some high schools did not have the courses available to them because of their geographic location. The case was settled out of court through mediation. In 1999, the ACLU filed a lawsuit in *Daniels v. State of California* against California and its board of education for failing to

make advanced placement courses accessible to minority students. The case was stayed and the parties worked with a team of educational experts to find a resolution outside of the court system (Springer, 2003).

In 1998 the University of Maryland's school of medicine denied Rob Farmer admission, and he filed a lawsuit against the university in a federal district court. Farmer alleged that the university had "drastically lower standards for the admissions of members of certain favored minority groups" (p.11). The district court found that race was used as a factor in the university's admissions decisions. But the court ruled in favor of the university anyway because it said Farmer never intended to attend the university. Many other cases have been filed against higher education institutions in states including Oklahoma, Virginia, Alabama, Louisiana, Maryland, and Tennessee (see Springer, 2003).

### 2.12 SUMMARY

To summarize, this study was framed to demonstrate that while there are enormous benefits to the enactment of racial and ethnic diversity in the higher education classroom, there are major challenges that may have limiting affects on the implementation of racial and ethnic diversity and the optimization of those benefits at the levels of the classroom, faculty personal lives, and the institutional and the larger society environments. At the level of the classroom, some of the challenges are generated by diversity itself. The literature demonstrates that the racially and ethnically diverse classroom shows a proliferation of diverse learning styles/preferences that are culturally-based. As a result, teaching and learning may need to be negotiated through the use of new and different pedagogies – or active teaching/learning methods – if faculty members are to be effective in the performance of their instructional roles.

However, we have also seen that culturally-based learning styles/preferences are just one among many challenges in the classroom. The literature shows that there are prejudices and stereotypes in the racially and ethnically diverse educational setting.

Underperformance due to intellectual stigma, uneven levels of academic preparedness, anxiety about the dilution of academic quality, and language problems are all present in the racially and ethnically diverse classroom. These classroom diversity-related challenges create a dynamic that impacts teaching and learning.

As a social and ethnic being, however, faculty members are not insulated from and/or impervious to their environment: their personal lives, the institutional environment, and the larger society. How they perceive racial and ethnic diversity may be influenced by who they are, namely, their race and ethnicity, their gender, and their

personal beliefs. But also their perceptions may be influenced by their satisfaction or dissatisfaction with their roles in issues such as institutional governance, general institutional attitudes toward racial and ethnic diversity, and the attitudes toward the enactment of racial and ethnic diversity within the larger society. The literature review has addressed in a more general way some of the various sources and their accompanying challenges to racial and ethnic diversity outside the classroom, and more specifically many of the challenges generated within the classroom. By addressing various challenges posed to racial and ethnic diversity, or posed by racial and ethnic diversity, whether classroom-based or outside the classroom, the context of the study is enlightened. Racial and ethnic diversity may not be properly studied without linking it with broader issues surrounding it.

Finally, we must note that there is no lack of literature on the subject of racial and ethnic diversity. As the literature review has shown, the subject is broadly researched, beginning with policy debates in the larger society to institutional climate and its affects on students to the classroom. However, while the racially and ethnically diverse classroom remains a part of these studies, there are few studies, if any, that have been done on racial and ethnic diversity in the classroom regarding faculty instructional roles at institutions that are actually racially and ethnically diverse. As demonstrated in this study, studies on faculty instructional roles and faculty perceptions of racial and ethnic diversity are often done at non-racially and ethnically diverse institutions. Many of these studies survey or interview faculty members who have never taught at racially and ethnically diverse institutions, and do not have the needed experiences with the benefits as well as challenges of racial and ethnic diversity. As better understanding is needed on

not just the benefits of racial and ethnic diversity in the classroom but the challenges that must be navigated and overcome by faculty to ensure that those benefits are optimized and fully appropriated, we need more studies to be done in institutions that are racially and ethnically diverse.

Therefore, this study is intended as one of such studies. In this case, the purpose is to seek to understand how the challenge(s) posed by the presence of diverse culturally-based learning styles/preferences in the racially and ethnically diverse classroom at Gola University – one of the most racially and ethnically diverse institutions in the continental United States -- has impacted how faculty perceive their roles in the classroom, their choice and use of various teaching methods, their choice and use of course content, their choice and use of various evaluation methods, and the role that experience in teaching in such an environment plays on their perceptions and decisions. By assessing how faculty perceptions of the presence of culturally-based learning styles/preferences affect their instructional roles, and how experience in teaching in the racially and ethnically diverse learning environment influences that, this study could be used in faculty development to help equip new faculty with knowledge that may be useful in improving their effectiveness as they begin their careers in teaching in such a context.

### 3.0 METHODOLOGY

#### 3.1 INTRODUCTION

This chapter discusses the research design and the data to be collected. Second, it identifies and discusses the dependent variables and how they are related to the research questions. Third, this chapter discusses how the survey instrument was designed, the questionnaire items were developed, and how they addressed the research question. This chapter also identifies and discusses the independent variables and their relevance. Furthermore, this chapter discusses how the collected data will be processed and coded. Finally, the next chapter (chapter 4) discusses in detail how the data were analyzed and displayed. Chapter 4 also summarizes the study and explains the coherence between the chapters. In concluding, chapter 4 discusses the limitations of the study and makes, further research on the issues addressed in this study, and makes recommendations for further studies on those issues where necessary.

#### 3.2 RESEARCH DESIGN

# 3.2.1 Participants

Through the permission of Gola University's administration and the permission of the faculty, data for this study were collected from faculty members teaching in Gola

University's traditional undergraduate programs (N=70). The intended population comprised all full-time faculty members of the traditional undergraduate programs. The traditional undergraduate programs consist of four schools: College of Arts and Sciences; School of Business, Computer Science, and Communication; School of Education; and School of Music. The data collection methods included survey instrument and interviews of willing faculty members.

# 3.2.2 Survey Instrument Design and Pilot-Testing

The survey instrument was designed and pilot-tested three times before its final form was achieved. During this process, some 35 faculty members willingly participated in the testing. The participants of the pilot-testing were faculty members from another higher education institution with the same stripes (e.g., faith-based, largely undergraduate population, and mainly teaching institution). The main difference between the target population for this study and the piloted population is the level of diversity: the former is more diverse and the latter is less diverse. It was difficult to duplicate the target population's relatively high level of diversity in the pilot-testing of the survey instrument.

The questionnaire was designed as follows: First, the variables to be addressed in the survey questionnaire were identified from the literature review and addressed in the research questions. The variables were then divided into two groups: demographic variables (e.g., race/ethnicity, gender, faculty teaching experience, and faculty discipline), and the second group consisted of faculty perceptions of variations in learning styles/preferences among diverse students (Anderson, 1989; Sandhu, 1994; Reid, 1995; De Vita, 2001), faculty perceptions of their choice and use of various teaching methods (Davis, 1993; Weimer, 1996; August, Hurtado, Wimsatt, & Dey, 2002), selection and use

of course content as a way of meeting various curricular needs in the racially and ethnically diverse learning classroom (Davis, 1993; Marin, 2000; Gurin, Dey, Hurtado, & Gurin, 2002, 2003), faculty perceptions of their roles in the classroom (Weimer, 1996; August et al, 2002; Lee, 2005), and faculty choices and uses of evaluation methods (Anderson, 1989; McGregor, 1990; Davis, 1993; Sandhu, 1994; Weimer, 1996; August et al, 2002). Second, the Scholarship of Teaching Model by Trigwell and Shale (2004) influenced several aspects of the development of the instrument: the model divides teaching into a scholarship with three areas that are fluid, namely, knowledge domain, practice domain, and evaluation. The model shows that context knowledge is integral to curriculum development and choice of methods and evaluation. This knowledge was used in the selection of faculty experience as the main independent variable for this study, although findings from other studies (Fjortoft, 1993; Milem, 2001) were brought to bear on the decision. In sum, the model created a framework within which the survey instrument was constructed.

Next, the variables to be addressed (based on the research questions and rooted in the literature review) were all composite variables. Consequently, the questionnaire items belonging to each of these composite variables were identified and assigned accordingly, using the appropriate literature review. In an attempt to determine the appropriate scales to be use to measure participants response, the Likert's Scale was identified for a set of items, and a percentage scale was identified as appropriate for others. Care was taken to construct a questionnaire that was concise in language and precise in content. Faculty members were instructed to choose only one response to any questionnaire item.

Furtheremore, they were advised to scribble in any suggestion(s) or observation(s),

including criticisms of the questionnaire on the length of the questionnaire, ambiguity in questions, and ordering of items.

The questionnaire was then distributed to faculty members for the first pilottesting. All the questionnaires were returned in a week. Each contained no less than 3 suggestions, ranging from wordings, clarity issues, re-arrangement of items, etc. Each set of comments were carefully reviewed and the necessary corrections were made. The survey was revised and re-submitted, asking to be completed and also to provide additional input. This was repeated twice and the final form for the survey questionnaire was achieved.

Finally, during the final two revisions, the data collected were coded, entered in the Statistical Software used to analyze the data for this study, the SPSS v.14, and analyzed. This was done to determine whether the data sought were being accurately measured by the survey instrument. During the analysis, Descriptive Statistics were measured (mean, mode, range, and standard deviation), cross-tabulations were done and contingency tables were developed, correlations were determined among variables, linear and partial regressions analyses were done on the data. The results were found to be satisfactory, and the instrument was determined to be valid, reliable, and suitable for use to collect data for this study.

#### 3.2.3 Interview Questionnaire

Once the survey questionnaire was developed, it was less difficult to design the interview questionnaire. The interview questionnaire was designed and intended to do follow up data collection more broadly. Since the instrument was administered onsite, it consisted of many open-ended questions so that it would provide opportunity for additional follow-

up question if and when necessary. The goal of the interview questionnaire was to help gather information that was necessary to provide understanding of the diversity program at Gola University. The data to be collected by the interview questionnaire were identified both from the literature review and reading more on Gola University's diversity program.

#### 3.2.4 Data Collection

After Gola University had been identified as the appropriate context for the collection of data for this study, a letter was sent to the Administration explaining that Gola University has been selected for the study, the purpose of the study was explained, and then permission was asked to allow the study to be conducted. The Administration granted permission to conduct the study. Next, faculty members were contacted and asked via e-mail to participate in the study, and the purpose of the study was explained to them.

In the spring of 2006, the data collection began. The researcher traveled to Gola University to administer the survey and interview faculty in the spring of 2006. The survey questionnaire was often administered first, followed by the interview, if the faculty member had consented to do an interview. Participants participated voluntarily, and signed the confidentiality agreement form prior to proceeding with completing the survey. They were instructed not to include any personal information on the survey during completion in order to maintain their anonymity. For the interview portion, a limited number (N=15) of faculty participated.

The return on the survey questionnaire was 40 faculty members, about 57 percent of all faculty in the four colleges in the undergraduate programs. Because the return came

from across all the schools in the undergraduate programs, this return was determined as adequate for purposes of this study.

The interview data were collected using audiotapes and notepads. Numbers were assigned at the beginning of each interview to distinguish from previous and succeeding interviews. It began like this: "This is interview number X." No participant names were associated with any interview data. Upon completing and transcribing an interview, the contact information was immediately discarded. This was done to maintain confidentiality as agreed upon by both the participants and the researcher.

### 3.2.5 Dependent Variables

There are five composite variables that have been identified for purposes of this study, based on the research questions. They are (1) variations in learning styles, (2) use of various teaching methods, (3) choice and use of course content, (4) faculty roles in the classroom, and (5) choices and uses of evaluation methods. This section discusses the importance of the dependent variables and links them with the literature review and the research questions. This section also links the dependent variables to the survey questionnaire items by demonstrating how the survey items are derived.

# 3.2.5.1 Variations in Learning Styles among Diverse Students

Faculty perceptions of variations in learning styles in the classroom are based on their experience in and awareness of the classroom context. According to Trigwell and Shale (2004), awareness of the classroom environment is an important part of faculty instructional roles. It provides familiarity with the challenges and opportunities in the classroom setting. This familiarity enables faculty to tailor their pedagogy in a way that

makes them more effective, as well as optimize student learning. Learning style is a characteristic of the racially and ethnically diverse context (Sandhu, 1994; Stebbins, 1995; De Vita, 2001; Le Roux, 2001), and context knowledge includes knowledge about learning styles. Some scholars have recommended that faculty who teach in racially and ethnically diverse classrooms give particular attention to learning style differences (Short, 1989; De Vita, 2001; Le Roux, 2001; Wolfgang, 2001). By measuring faculty perceptions of variations in learning styles/preferences among students at Gola University, we are able to confirm, according to the literature, one of the challenges faculty members at Gola University confront in the classroom, namely, the proliferation of learning styles/preferences (Anderson, 1989; Sandhu, 1994; De Vita, 2001).

The scale for research question 1 consists of 6 items. Each faculty member was asked to respond to all 6 items, selecting only one answer choice among the four that are given on a Likert scale. The choices were: 1 -Strongly disagree; 2-Somewhat disagree; 3-Somewhat agree; 4-Strongly agree. Table 3.1 below depicts research question 1, the dependent variable (variations in learning styles), and the questionnaire items.

Table 3.1. Variable: Faculty Perceptions of Variations in Learning Styles/Preferences

Research Question 1: How has faculty experience with teaching in the racially and ethnically diverse classroom affected their awareness of culturally-based learning styles/preferences among students of minority status?

#### **Ouestionnaire Items:**

My experience with teaching in the racially and ethnically diverse classroom context has enabled me to see that:

- 1. students of color (racially and ethnically diverse students) tend to prefer *cooperative* learning style (working together).
- 2. students of color tend to prefer *group study* learning style (study with others).
- 3. students of color tend to prefer *small group discussions* over individualized work.
- 4. students of color tend to prefer *group projects* over competitive individual assignments.
- 5. students of color tend to prefer *personally relevant knowledge/information* (can apply).
- 6. students of color tend to prefer *relational learning* style (less competition).

## 3.2.5.2 Questionnaire Items Development for Research Question 1

The questionnaire items (items #1to #6) for research question 1 were developed using Anderson (1989) and Sandhu (1994) studies which identified racial and ethnic minorities as preferring less competitive and more relational learning styles/preferences and environments. Some of the wordings in their respective texts were modified to fit the needs of the items in this study without distorting the concepts. Anderson (1989) introduced these as findings to his study to show that racial and ethnic minorities introduce another level of challenges to teaching in the form of learning styles or preferences. Sandhu (1994) later used these learning attributes in his own study on diverse students and their learning preferences to show that effective teaching involves being aware of these culturally-based learning styles/preferences and compensating for them in the racially and ethnically diverse educational environment. The items in table 3.1 addressing research question 1 were specifically designed from Anderson (1989) and

Sandhu's (1994) findings. De Vita's (2000) conclusion that culturally-based learning styles proliferate racially and ethnically diverse learning environments is identical to Anderson (1989) and Sandhu's (1994) findings. By assessing faculty perceptions of variations in learning styles/preferences in the context of this study, faculty awareness of the existence of these culturally-based learning styles/preferences will be known. Faculty response to these learning styles/preferences in their instructional roles – choice and use of various teaching methods and to how they evaluate student work -- determines how racial and ethnic diversity impacts faculty instructional roles in the area of learning styles/preferences.

### 3.2.5.4 Choice and Use of Various Teaching Methods

Faculty perceptions of their choices and uses of various teaching methods depend on their view of the usefulness of those methods in accomplishing their curricular goals and objectives. August, Hurtado, Wimsatt, and Dey (2002) and other researchers have presented active learning/teaching methods as a result of more than a decade-long extended efforts to respond to calls to improve undergraduate education. The implied premise is that undergraduate education has suffered over the years because faculty have not been sensitive to the changing learning needs of the undergraduate college student population and/or responded to those needs in their pedagogies. Research question 2 assesses whether or not, and to what extent, these active learning/teaching methods are used by faculty at Gola University, the context of this study. This knowledge is assessed in relation with faculty experience in teaching in this context. Inoue and Johnson (2000) and Milem (2001) claim that faculty experience affects their perception of the racially and ethnically diverse learning environment. Inoue and Johnson's (2000) claim that

experience negatively impacts faculty perception of racial and ethnic diversity in the classroom. Milem's (2001) study, on the other hand, indicates that experience has a positive affect on faculty perception of racial and ethnic diversity in the classroom. In other words, long-tenured faculty teaching in racially and ethnically diverse environments view racial and ethnic diversity positively. They believe that it has benefits for learning and becoming a productive citizen in a pluralistic democracy (Gurin et al, 2002; 2003). However, while the study population was diverse in Inoue's and Johnson's study, faculty were largely Caucasians. This may have impacted their findings. Similar outcome as Inoue and Johnson's (2000) is evident in Rothman, Lipsett, and Nevitte's (2002) study, where faculty said they supported racial and ethnic diversity yet show reticence when asked whether they would like to see it implemented among their various student bodies. Rothman et al (2002) study was conducted among non-racially diverse faculties.

Thus, faculty use of active learning/teaching methods, or culturally-based learning methods, in the classroom may be based on their awareness of the existence of culturally-based learning styles/preferences in the racially and ethnically diverse classrooms where they teach due to experience in that context. By knowing how faculty experience in teaching in the racially and ethnically diverse classroom has affected their choice and use of teaching these and other learning/teaching methods, this study determines how racial and ethnic diversity affects faculty instructional role of teaching.

The scale for research question 2 has 5 items. Each participant was asked to answer to all items, selecting only one of four answers per item. The answer choices for each item are the following: 0 to 25%, 26% to 50%, 51% to 75%, and over 75% (in

amount of class time). Table 3.2 depicts the dependent variable, research question, and the questionnaire items.

Table 3.2. Variable: Faculty Perceptions of Their Choices and Uses of Various Teaching Methods

Research Question 2: How has faculty experience with teaching in the racially and ethnically diverse classroom affected their choice and use of diverse teaching methods?

#### **Questionnaire Items:**

During any semester long course,

- 1. I lecture (primarily speak to students as a large group) as part of the learning experience.
- 2. I use small group discussions (several small groups discussing among themselves during the class period) as part of the learning experience.
- 3. I use student presentations (individual or groups of students organizing and presenting information) as part of the learning process.
- 4. I use group projects (a specific assignment to be completed by small groups of students) as part of the learning process.
- 5. I use various field-based experiences (visiting a museum, conducting an outdoor experiment, visiting historical sites, etc.) as part of the learning experience.

# 3.2.5.5 Questionnaire Items Development for Research Question 2

Questionnaire item #1 was developed from Davis (1993) and Soroyan and Snell (1997), and items #2, #3, #4, and #5 were derived from Milem (2001) and Weimer (1996), supported by Sandhu (1994) and Anderson (1989). Milem notes that "cooperative learning, student presentations, group projects, experiential learning, students' evaluations of other others' work…" (p.4) are part of active learning methods that are useful and non-traditional. Weimer (1996) defines group work as "…activities completed in class and group work that occupies students outside of class" (p.61). These elements of active learning/teaching methods (Davis, 1993; Weimer, 1996; August, Hurtado, Wimsatt & Dey, 2002) and diverse students' learning styles/preferences (Anderson, 1989; Sandhu,

1994; Nelson, 1995) are similar, if not identical. August et al (2002) define active learning/teaching methods as any pedagogies that involve students directly in their own learning, with faculty being facilitators, collaborators, and coaches. This definition, in one way, casts the lecture as traditional pedagogy which encourages memorization, but did not exclude it as unnecessary. However, the lecture a useful, viable pedagogy, and is the most widely used in many disciplines, especially the sciences and mathematics. The lecture is the oldest pedagogy to be employed in the classroom (Hrepic, Zollman, & Robello, 2004).

### Active learning/teaching methods

involve students more directly in the learning such as one-minute papers and similar in-class exercises that require active engagement with the material and provide feedback to the student, journaling, and other reflective exercises that require the student to examine her/his experience with the process of learning as well as the product, and by asking students to prepare questions related to the material being covered and engage in *discuss*. (p.5, italics mine)

Therefore, the lecture, small group discussions, student presentations, group projects, and various field-based experiences are included in the items to address research question 2. Active learning/teaching methods, or culturally-based teaching methods – small group discussions, student presentations, group projects, and various field-based experiences – are perceived as non-traditional pedagogies faculty are likely to employ in the racially and ethnically diverse learning classroom based on their awareness of the pedagogical needs for that environment. Because a discipline may influence the choice of teaching method, faculty expertise or discipline was controlled when analyzing for the impact of experience on choice and use of teaching/learning methods. Also, the impact of faculty expertise or discipline was determined and recorded to see how discipline may affect choice and use of teaching methods.

Thus, to show the theoretical basis for each of the questionnaire items in table 3.2, table 3.2.1 is provided below. The table below shows some of the literature that address the various teaching/learning methods used to develop the questionnaire items, beginning with the lecture, which is still popular in many disciplines, and the active learning/teaching, or culturally-based, methods. These sources provided are selective.

Table 3.2.1 Variable: Sources of Individual Questionnaire Items for Research Question 2

<b>Teaching Methods</b>	Research (Source)
1. The use of the lecture	August et al (2000); Hrepic, Zollman, &
	Robello, (2003); Stunkel (1999); Saroyan
	& Snell (1997)
2. Small group discussions	Milem (2001), Anthony & Boatman
	(1994); Stunkel (1999); August et al
	(2000); Sandhu (1994); Anderson (1989),
	Saroyan & Snell (1997)
3. Student presentations	Trembley & Downey (200_); August et al
	(2000); Antony & Boatman (1994).
4. Use of student group projects	Antony & Boatman (1994).
5. Field-based learning experiences	Howard (1998); Mendel-Reyes (1998)

#### 3.2.5.6 Selection and Use of Course Content

The selection and use of course content is usually based on curriculum (Davis, 1993; ASCD Yearbook, 1998). Curriculum planning encompasses a determination of learning objectives, choice of course content, and choice of means of content delivery. However, the choice of means to deliver content is related to context knowledge and desired learning outcome (Trigwell & Shale, 2004). Context knowledge is an awareness of the classroom setting that is based on one's knowledge and/or experience in teaching in such context. As there may be prejudices and stereotypes in the racially and ethnically diverse classroom that seek to inhibit learning (Rothschild, 2003; Brown & Dobbins, 2004), it

provides vast opportunities for cross-cultural understanding and interracial interactions through collaborative activities (Gurin, Dey, Hurtado, & Gurin, 2002, 2003; Chang, Astin, & Kim, 2004). The selection and use of course content in the multicultural classroom may seek to limit the challenges posed by prejudices and stereotypes, among other things, and maximizing the opportunities for learning. For example, Gurin et al (2002, 2003) define classroom diversity has having multicultural course content included in the curriculum. The authors believe that this provides opportunity for discourse on the ethnic and racial backgrounds, values, and cultures. Such an education provides for better understanding that improves race relations, the authors assert. Other studies show that the use multicultural course content is affected by gender and race. Female professors as well as faculty of minority status are more likely to use multicultural course content than their White male counterparts (Fjortoft, 1993; Milem, 2001; Mayhew, 2003). However, context knowledge affects lesson planning and content selection, and faculty teaching the multicultural classroom may choose course content based on the observed need, and that may include multicultural course content (Trigwell & Shale, 2004). Research question 3 assesses how faculty experience with teaching in the racially and ethnically diverse classroom affects their use of multicultural course content. Since the choice of multicultural course content is affected by race, ethnicity, and gender, these variables will be controlled in order to determine accurately determine the impact of experience on the choice of multicultural course content. The extent to which faculty experience significantly affects their choice and use of multicultural course content in the classroom indicates whether or not racial and ethnic diversity in the classroom affects that aspect of faculty instructional roles.

To assess faculty use of multicultural course content, a four-item scale is used. Each participant was asked to answer to all 4 items based on his/her experience of teaching at Gola University (see Table 3.3). Four answers are provided to each item, based on the Likert scale as: 1 – Strongly disagree; 2 – Disagree; 3 – Agree; 4 – Strongly agree. Each respondent was required to choose only one answer that very closely reflected his/her position.

Table 3.3. Variable: Faculty Choice and Use of Use of Course Content

Research Question 3: How has faculty experience with teaching in the racially and ethnically diverse learning classroom affected their use of multicultural course content?

#### Questionnaire items:

My experience with teaching in the racially and ethnically diverse classroom has prompted me to:

- 1. include course content that addresses more contemporary issues that are relevant to students of color (racially and ethnically diverse students).
- 2. include course content that addresses diverse historical issues that are relevant to students of color.
- 3. include course content that consists of readings by authors whose races and/or ethnicities are represented among the racial composition of my students. diverse students.
- 4. change pedagogy to encourage discussion among students.

# 3.2.5.7 Questionnaire Items Development for Research Question 3

Questionnaires items #1, #2, #3, and #4 are based primarily on Ofori-Dankwa and Lane's (2000) article on the four approaches to cultural diversity, Hyde and Ruth's (2002) study on multicultural course content and class participation, but the questions were literally adapted and modified from Maruyama and Moreno's (2000) study entitled University Faculty Views of Diversity on Campus and in the Classroom. (The study used the Higher Education Research Data from UCLA). Ofori-Dankwa and Lane (2000) state that "an author using the diversity paradigm emphasizes the importance of ethnic, racial

and gender issues..." (p.495). However, the selection and use of certain course contents bring awareness to learners' backgrounds, certain cultural values, and enhance understanding (Davis, 1993; Marin, 2000; Hyde & Ruth, 2002; Gurin, Dey, Hurtado, & Gurin, 2002, 2003). Course content related to multicultural materials (e.g., information centered on minority cultures, contributions, and values) is recommended for accomplishing such a task (Gurin, Dey, & Gurin, 2002). The questionnaire items that were used to address research question 3 are based on the kinds of issues that multicultural materials used in the racially and ethnically diverse classroom mostly address.

In Maruyama and Moreno's (2000) study the four questionnaire items may be referred to as follows: "Raise racial/ethnic issues in your classes; adjust a course syllabus to include racial/ethnic issues; change pedagogy to encourage discussion among students" (p.17). The inclusion of "contemporary issues" in the question also comes from Inoue and Johnson's (2000) study entitled *Diversity and Multiculturalism in Higher Education*. (Study was done at University of Guam). In their study they refer to relevant curriculum for the racially and ethnically diverse context as the "knowledge of connections that can be made between general societal values and those of cultural groups..." (p.8). However, Maruyama and Moreno's (2000) study and Inoue and Johnson's (2000) differ from this study because in the former, students and faculty were not diverse; and in the latter, only students are diverse. This study, on the other hand, is conducted in one of the most racially and ethnically diverse higher education in the continental United States in terms of students and faculty. Table 3.3.1 shows the literature that addresses the 4 items that are used to address research question 3.

Table 3.3.1. Sources of Questionnaire Items for Research Question 3

Select	ion and use of course content	Research (Source)	
1.	Course content that addresses contemporary issues that re relevant	Ofori-Dankwa & Lane (2000); Marin (2000); Inoue & Johnson (2000);	
	to of color	Maruyama & Moreno (2000); Hyde & Ruth (2002).	
2.	Course content that addresses	Ofori-Dankwa & Lane (2000); Marin	
	diverse historical issues that are	(2000); Inoue & Johnson (2000);	
	relevant to students of color	Maruyama & Moreno (2000).	
3.	Content that consists of readings by	Ofori-Dankwa & Lane (2000); Marin	
	authors whose races and/or	(2000); Inoue & Johnson (2000);	
	ethnicities are represented among	Maruyama & Moreno (2000).	
	the racial composition of students		
4.	Change pedagogy to encourage	Ofori-Dankwa & Lane (20000; Marin	
	discussion among students	(2000); Inoue & Johnson (2000); and	
		Maruyama & Moreno (2000); Gurin et al	
		(2002, 2003).	

# 3.2.5.8 Faculty Roles in the Classroom

Faculty perceptions of their roles in the classroom affect how they teach (Combs, 1978, 2001; Soltis, 1985; Macgregor, 1990; Lee, 2005). In this study, those roles are classified as facilitator and collaborator (August, Hurtado, Wimsatt, & Dey, 2002) and coach in the learning process (Davis, 1993; August et al, 2002). According to August et al (2000), when active learning/teaching methods, are used, the faculty member ceases from becoming an expert-authoritarian figure to a participant in the learning process. These methods help student to engage their learning directly. This enables the faculty member to facilitate, collaborate, coach, and/or partner with students in their learning. "As facilitator the teacher helps to open opportunities and helps students define their own roles and needs as learners. In this role the teacher becomes more closely identified with students and their potentialities and aspirations" (Davis, 1993, p.49-50).

Some faculty members find the need to introduce different teaching methods based on their perceptions of differences in learning styles/preferences in the classroom, some use different teaching methods because they believe they are effective, while others may introduce different teaching methods they perceive as helpful to fulfill their roles either as collaborators, facilitators, or givers of knowledge in student learning (Weimer, 1996; August, Hurtado, Wimsatt, & Dey, 2002; Lee, 2005). Seeking to know whether faculty view of their roles is affected by their experience or the presence of different learning styles/preferences helps to further understand how racial and ethnic diversity in the classroom affects faculty instructional roles. While there may be more roles that faculty could play in the classroom, only three roles are identified for this study, because they are associated with active learning/teaching methods (Davis, 1993; August et al, 2002).

The scale for research question 4 contains 3 items. Each respondent was asked to answer to all 3 items based on their teaching experience at Gola University (see Table 3.4). Four possible answers were provided to each item, using the Likert scale as: 1 – Strongly disagree; 2 – Disagree; 3 – Agree; 4 – Strongly agree. Each respondent must choose only one answer that closely reflects his/her position.

Table 3.4. Variable: Faculty Perceptions of Their Roles in the Classroom

Research Question 4: How has faculty experience with teaching in the racially and ethnically diverse classroom affected their perception of their roles in the classroom (e.g., facilitator, collaborator, coach, or expert)?

#### **Questionnaire items:**

Over the years, the presence of preferred learning styles in my classroom here has prompted me to:

- 1. View my role primarily as a *facilitator* of the learning process.
- 2. View my role primarily as a *collaborator* of the learning process.
- 3. View my role primarily as a *coach* in the classroom.

# 3.2.5.9 Questionnaire Items Development for Research Question 4

Questionnaire items #1, #2, and #3 were derived from August, Hurtado, Wimsatt, & Dey (2002) and Sandhu (1994). In making reference to the use of faculty when using active learning methods, August et al (2002) write: "The use of the teacher becomes that of a facilitator, which is fundamentally different from the role of the teacher as an instructor...In the role of facilitator, faculty become coaches and guides to learning..." (p.5). Other sources for the questionnaire items are Davis (1993), Weimer (1996), and Lee (2005).

The three nouns used – facilitator, collaborator, and coach – are also used to refer to faculty roles in Davis's (1993) text entitled *Better Teaching, More Learning:*Strategies for Success in Postsecondary Settings, August, Hurtado, Wimsatt, and Dey's (2002) study on active learning methods, and Lee's (2005) article on collaborative learning. These concepts are developed and interspersed throughout the research literature on faculty instructional roles.

In addition, how faculty view their roles affect how they do lesson planning and how they teach in the classroom. Thus, by assessing how faculty perceive their roles in

the racially and ethnically diverse classroom, based on their experience in teaching in such context, this study determines how faculty instructional roles may be impacted by racial and ethnic diversity. Table 3.4.1 below summarizes the specific literature used to form the 3 questionnaires items in Table 3.4.

Table 3.4.1. Sources of Questionnaire Items for Research Question 4

Faculty Roles in Classroom	Research (Source)	
1. Facilitator	Davis (1993); Sandhu (1994); August et al (2002)	
2. Collaborator	McGroarty (1989); Weimer (1996); Lee (2005)	
3. Coach	Davis (1993)	

## 3.2.5.10 Faculty Choices and Uses of Evaluation Methods

Faculty choices and uses of instructional methods are a part of faculty instructional roles. Evaluation is the means by which faculty determine whether or not they have been effective and/or successful in their teaching (Trigwell & Shale, 2004). Evaluation is an exercise that assesses student performance after a learning session or period. The methods vary, ranging from objective tests to individual projects, classroom presentations that demonstrate student knowledge and their acquisition of certain skills, etc (Weimer, 1996). For research question 5, a scale of 5 items are chosen to address faculty choice and uses of evaluation methods. Each participant was asked to answer to all the 5 questionnaire items by circling "the answer that best applies to you." The objective was to know faculty use of the 5 evaluation methods provided in the questionnaire items: 1 – Rarely, 2 – Sometimes, 3 – Most of the time, and 4 – Always. Table 3.5 depicts the dependent variable, research question, and the questionnaire items.

Table 3.5. Variable: Faculty Choices and Uses of Evaluation Methods

Research Question 5: How has faculty experience with teaching in the racially and ethnically diverse classroom affected their choices and uses of evaluation methods?

### **Questionnaire Items:**

In my student evaluations,

- 1. I use objective tests (quantitative, yes-no, a, b, c measures).
- 2. I use individual student projects.
- 3. I use individual student presentations in class.
- 4. I use group projects.
- 5. I use group presentations in class.

# 3.2.5.11 Questionnaire Items Development of Research Question 5

Questionnaire items #1, #2, #3, #4 and #5 were primarily derived from the text entitled *Better Teaching, More Learning* by Davis (1993) and Weimer (1996). Davis' text addresses the classroom setting, teaching strategies, evaluation methods, and roles of the faculty. Weimer (1996, p.101-112) addresses many of the various methods of examining students and testing their learning, including objective tests, essays, problem solving, and take-home exams. McGregor (1990) also specifically addresses questionnaire items #4 and #5. Table 3.5.1 below provides some of the sources that influenced the development of the research items in table 3.5.

Table 3.5.1. Sources of Questionnaire Items for Research Question 5

<b>Evaluation Methods</b>	Research (Source)
1. Objective tests	Davis (1993); Weimer (1996);
2. Individual student projects	August et al (2002), McGregor (1990)
3. Individual student presentations	August et al (2002), Angelo et al (1990)
4. Group projects	McGroarty (1990); Davis (1993);
	McGregor (1990); Anderson (1989);
	Sandhu (1994); Weimer (1996); August et
	al (2002)
5. Group presentations	McGroarty (1990); McGregor (1990);
	Davis (1993); Anderson (1989); Sandhu
	(1994); Weimer (1996) August et al (2002)

### 3.2.6 Operationalizing Independent Variables

The review of literature shows that experience, race, and gender affect faculty attitudes toward racial and ethnic diversity in the higher education context. Faculty of minority status, female and senior faculty are found to respond better to racial and ethnic diversity. This means each of these variables will exert their own relative affects on faculty response to racial and ethnic diversity in the classroom.

# 3.2.6.1 Experience

The main independent variable in this study is *experience*. The study proposes that for faculty members to be able to understand the nature of the impact racial and ethnic diversity has on faculty instructional roles, they must have experience teaching in racially and ethnically diverse classrooms, whether in their current jobs or in a similar context. This experience varies across four levels: 0 to 5 years (low), 6 to 10 years (moderately low), 11 to 15 years (moderately high, and 16 years and over (high). This study expects that experience affect faculty knowledge and behaviors, either up or down (Fjortoft, 1993; Milem, 2001). A limited (or low) teaching experience suggests a limited knowledge of context. On the other hand, a high faculty experience suggests better knowledge of context (Fjortoft, 1993; Milem, 2001; Trigwell & Shale, 2004). Inoue and Johnson (2000) have shown that experience has significant impact on faculty attitude toward racial and ethnic diversity in the classroom. One of the interview questions was focused on this aspect of faculty knowledge, namely, whether new faculty are required to attend workshops as part of faculty orientation or training to assume their roles in the classroom.

### 3.2.6.2 Race/Ethnicity

While experience remains the main independent variable, race/ethnicity may have some affect on dependent variables. The review of literature shows that students of minority status feel more comfortable with faculty members who are their own race (Gonzalez & Padilla, 1999; Rothschild, 2003; Mayhew, 2003; Brown & Dobbins, 2004). Similarly, White students show more respect to White faculty than faculty of minority status. Also, studies show that faculty of minority status is more likely to incorporate issues of diversity in their pedagogy compared to European American faculty. According to Milem (2001) faculty of minority status are more likely to use diverse teaching methods in their classrooms. Therefore, race and ethnicity are accounted for as variables that may exert some influence on faculty instructional roles. Race/ethnicity has been given a value of 1 to 5 as follows: 1-Black; 2-White; 3-Hispanic (Latino/Latina); 4-Asian; and 5-other. At this level of coding, race is defined as a nominal variable whose value and impact can be measured. The measure for central tendency for race/ethnicity used in this study is the *mode.* It will be helpful to know race/ethnicity of the faculty members whose responses may lean heavily one way or another.

#### 3.2.6.3 Gender

Studies show that gender influences faculty instructional roles. According to the review of literature, white female faculty members show more favorable attitudes toward racial and ethnicity than their white male counterparts, and they are more likely to use course content that are multicultural than white male faculty (Milem, 2001; Mayhew, 2003). This makes it more likely that gender might introduce its own relative impact on faculty instructional roles in some results. Consequently, *gender* is accounted for in the analysis.

To operationalize gender as a variable, the following discrete values were assigned: 1-male; 2-female. By coding gender in this way, it is a nominal variable and its relative impact may be measured.

# 3.2.7 Data Processing and Coding

The survey and interview data were processed separately. The returned survey questionnaires were inspected individually and edited to ensure that valid responses were recorded for every question. Those questionnaire items that had no responses were coded as missing, as required by the SPSS software (Babbie, Halley, & Zaino, 2000). Questionnaire items that that had more than one answer chosen when only a single answer was desired was coded as missing as well, because they violated the rules set for determining the correct responses.

The data were coded to meet the requirement for SPSS as follows: 1) An identification number was assigned to each respondent; 2) all variables were identified and assigned names; 3) each variable was assigned a type that corresponded with its level of measurement; and 4) each variable was assigned a value label and value. Upon coding the data, all data were entered into the SPSS data editor. To ensure that there were no errors, the data entered were examine meticulously to ensure that all the data collected were correctly entered.

# 3.2.8 Analysis of the Data

Descriptive Statistics were used to analyze the research data. The results of the analyses are displayed in frequency distribution tables, contingency tables (or cross-tabulations), and through central tendencies and dispersions. Frequencies have been run for all

variables, and are displayed in rates of response or percentages. The frequency distributions are used to gather information either on the entire sample, or on a variable of interest (e.g., race/ethnicity, levels of teaching experience, and gender.). Based on the particular level of measurement – whether nominal, ordinal, interval, or ratio – the appropriate central tendencies have been calculated and displayed, because "certain measures are appropriate for variables at certain levels of measurement" (Babbie, Halley, & Zaino, 2000, p.80). Since central tendencies consist of *mode, median, and mean*, any of these measures may be chosen based on two factors: the level of measures used, and its effectiveness in conveying the desired information or data. For example, for interval and ratio variables, *median* and *mean* are the appropriate measures of central tendency. Wherever the *mean* was more useful in conveying a piece of data than the *median*, it has been appropriately employed. Also, measures of dispersion such as *range* and *standard deviation* have been appropriately used based on the level of measurement used.

Whether it is frequency distributions, central tendencies (mean, mode, or median), standard deviations, they are used to specifically answer the research questions. Each research question is addressed individually. When pieces of information are gathered by assessing responses to various items, they are used to construct a meaning associated with the population being studied. Cross-tabulations are done to perform bi-variate analyses on data. For example, *experience* is used as an independent variable to analyze faculty awareness (perceptions) of learning style variations in their classrooms through cross-tabulations to answer research questions 1 through 5. Bi-variate analysis of two or more data provide better information on relationships between variables, specifically whether one influences the other in any significant way. Associated with cross-tabulations is the

Chi-square, a probabilistic co-efficient that shows strength of association between two variables and the direction of that association. The research questions are addressed primarily in the order in which they are listed in the study. Where necessary, additional analysis may be done on a sub-group or set of data to better explain or clarify a finding. In such cases, order may not be followed.

Finally, the next chapter has two sections: 1) demographic characteristics of respondents, and 2) responses to the research questions in chapter 1. By being so divided, this chapter provides detailed information about the participants that aids in explaining and discussion results. At the same time, it enables us to follow very relatively easily how the research questions addressing the research problem are specifically addressed. In other words, it answers question, "Did the research design and analysis actually address the research problem?"

### 4.0 RESULTS

#### 4.1 DEMOGRAPHICS

The survey questionnaire gathered demographic data such as race/ethnicity, gender, the length of their teaching experiences at Gola University, and their respective disciplines (e.g., which areas they specifically teach). These pieces of information were necessary in order to show exactly the population with which the study dealt and how the responses to the survey may be distributed among them. Because teaching *experience*, one of the demographic variables, is the main independent variable, we are able to see exactly what difference, if any, does experience make in faculty effectiveness in the racially and ethnically diverse context.

The 40 surveys that were returned of the population (N=70) and deemed acceptable because they had met the response criteria show a ratio of 2 to 1 between male and female as indicated in Table 4.1. This is an indication that Gola University is not only racially and ethnically diverse in its student body (little over 47 percent), but also has gender diversity. In terms of race and ethnicity Table 4.2 provides a clear assessment of Gola University's faculty diversity. We find that 11 faculty members are Blacks, 21 are White, 3 are Hispanic Americans, and 5 are Asian Americans. These data are important for understanding whether or not the institution's concern for diversity was primarily oriented toward students, or if it did provide comparable diversity among faculty

Table 4.1: Sex (N=40)

Gende	r	Frequency	Percent
Male		27	67.5
Female		13	32.5
	Total	40	100.0

so as to ensure that students of minority status may be able to relate to others of their ethnic and racial backgrounds.

**Table 4.2: Race and Ethnicities of Faculty (N=40)** 

Race/Ethnicity		Frequency	Percent
Black		11	27.5
White		21	52.5
Hispanic (Latino/Latina)		3	7.5
Asian		5	12.5
	Total	40	100.0

Table 4.3 shows the distribution of teaching experience, within the sample, among faculty members at Gola University. From this data, we notice that there more faculty members with lesser experience in teaching at Gola University than there are older tenured faculty. This data provide information that may be interpreted two ways: 1.) there is a higher turnover rate of faculty, or 2) a group of experienced faculty recently retired

after having enjoyed long years of service. The interview data provide an answer to this question.

Although some faculty may have enjoyed normal retirement over the years, there was a significant number of faculty turnover over a five-year due to dissatisfaction with the aggressiveness at which racial and ethnic diversity was being implemented. In the 1990's, there was a renewed commitment made by the leadership to recruit minority faculty members, since the student body was highly diverse and the faculty were largely White. As department heads were instructed to recruit qualified minority faculty members, a level of dissatisfaction and discomfort was created among the faculty and some department chairs and faculty resigned. This did not deter the leadership. Thus, the level of minority faculty diversity in Table 4.2 is a result of that turnover of White faculty.

**Table 4.3 Teaching Experience (N=40)** 

Teaching Experience		Frequency (F)	Percent
0-5 years		15	37.5
6-10 years		11	27.5
11-15 years		9	22.5
16 years and over		5	12.5
	Total	40	100.0

Table 4.4 shows distribution of disciplines among faculty in the sample. In brief, it shows that more faculty members are represented in the social science disciplines and religion and philosophy than the hard sciences. This information is important in that it helps us to gauge the distribution of certain responses such as choices and uses of

content, teaching, and evaluation methods, issues that are addressed research questions 2 to 5. For example, lecture has historically been the most utilized pedagogy in the hard sciences in traditional educational setting. Is there any change in that trend in the racially and ethnically diverse educational setting? Analyzing faculty choices and uses of teaching methods, using cross-tabulations, discipline being the demographic variable, may produce such information. However, correlations matrix (see Table 5.1) is employed to show, instead, how disciplines as a demographic variable is correlated with other variables, that includes faculty choices and uses of teaching methods.

**Table 4.4 Faculty Expertise** 

Discip	lines	Frequency	Percent
Social S	Sciences	24	60.0
		24	00.0
Hard Sciences		6	15.0
Religion	or Philosophy	10	25.0
	Total	40	100.0

Similarly, the relative impact of race and ethnicity are evaluated in relationship to all other variables in the study to determine its relative impact. Studies show that race and ethnicity influence faculty disposition on choices of course content and classroom pedagogy (Fjortfort, 1993; Milem, 2001). Whether this is true within the racially and ethnically diverse context will be determined by conduction correlations.

#### 4.2 ANSWERING THE RESEARCH QUESTIONS

#### 4.2.1 Research Question 1

Research question 1 asked: "How has faculty experience with teaching in the racially and ethnically diverse classroom affected their awareness of culturally-based learning styles/preferences among students of minority status?" To answer this question, a composite variable named *Variations in Learning Styles/Preferences* was developed and addressed with 5 questionnaires items (see Table 3.1). Table 4.1 below provides a frequency distribution for responses given to six questionnaire items that address research question 1. Variations in learning styles/preferences represent faculty perceptions or awareness of the presence of learning styles/preferences in the respective classrooms at Gola University.

Because learning styles/preferences is one of many variables that proliferate the racially and ethnically diverse classroom (Anderson, 1989; Sandhu, 1994; De Vita, 2001; Le Roux, 2001), faculty perceptions of learning styles may be influenced by their experiences. Table 4.2.1.1 contains frequency distributions of faculty affirmative responses (e.g., sum of agree and strongly agree) to the questionnaire items for research question 1. The items were preceded by *My experience with teaching in the racially and ethnically diverse classroom context has enabled me to see that:*. This stem helped to guide faculty response. Each response was meant to show that either experience with teaching in a racially and ethnically diverse context influenced faculty perceptions or it did not. As such, it helped to measure data based on experience. As Trigwell and Shale (2004) have indicated, knowledge of context is a product of time and circumstance. The

length of time spent teaching in a particular context may influence the amount of knowledge acquired about the dynamics of that context.

Table 4.5. Variable: Faculty Perceptions of Variations in Learning Styles (Total N=40)

Items	% of	Agree and	Strongly Agree
Students of color tend to prefer personally relevant knowleds Information (can apply)	ge/	32	80
Students of color tend prefer relational learning style (less competition)		22	55
Students of color tend to prefer small group discussions over Individualized work	r	20	50
Students of color (students of minority status) tend to prefer <i>cooperative</i> learning style (working together).		19	47.5
Students of color tend to prefer <i>group study</i> learning style (style with others)		16	40
Student of color tend to prefer group projects over competiti Individual assignments.	ve	15	37.5

As evidenced in Table 4.5, faculty affirmed that students of minority status prefer personally relevant information almost unanimously. In responding to questions on learning styles, one faculty member said, "Teaching in this place is a hard job. Not everyone can teach here, because if you as a faculty want to be effective, you have to learn to teach to accommodate students learning styles. It is that important. Also one thing of critical importance is to use materials that are relevant to them. So you have to include content that reflect issues that matter to racial or ethnic minority groups," she concluded. By inspecting the response rate for each of the items in Table 4.5, it is clear that the responses to the questionnaire items on learning styles/preferences are nearly split in the middle: nearly half agreed and half disagreed, with a slight majority on the side of the agreed. However, over three-fourths agreed that students of minority status tend to prefer *personally relevant knowledge/information*, something they can apply.

Table 4.6. Variable: Faculty Perceptions of Variations in Learning Styles (Total N=40)

Items	Mean	Std Dev.
Students of color tend to prefer <i>personally relevant knowledge/ Information (can apply)</i>	3.07	0.829
Students of color (students of minority status) tend to prefer <i>cooperative</i> learning style (working together)	2.475	0.933
Students of color tend to prefer <i>small group discussions</i> over Individualized work	2.47	0.847
Students of color tend prefer relational learning style (less competition)	2.525	0.905
Student of color tend to prefer group projects over competitive Individual assignments	2.325	0.730
Students of color tend to prefer <i>group study</i> learning style (style with others)	2.3	0.853

Next, the *means* and *standard deviations* of the sample data in Table 4.6 help in comparing the range and/or spread of each set of responses to the items. Wherever it is used in this manner, it maintains the same meaning. Results in Table 4.6 show how closely distributed the responses were around *disagree* and *agree*. The amounts of *disagree* and *agree* were nearly evenly matched. Also there were fewer *strongly disagree* and *strongly agree*, and those were evenly matched as well. students prefer less competition in class and more relational instruction, such as collaborating around projects or assignment. Also, nearly half agreed that students of minority status prefer cooperative work (Anderson, 1989; Sandhu, 1994; August, Hurtado, Wimsatt, & Dey, 2002).

In regard to group assignments, several professors indicated during the interview sessions that they agree students of minority status demonstrate culturally-based learning

styles, but many of them tend to prefer to work alone because group work frustrates them. One female said this:

One of the things that I could not say on the survey questionnaire that I can say about learning styles in this. In regard to group work or group projects, I definitely agree, but with a caveat. When these students are able to work together, you can definitely see have much fun they can have and how much they learn. However, some do not always enjoy group work, especially something causes them to meet outside of class. Their schedules often collide and causes problems. That leads to frustrations and some do not like group work because of that.

Some of these students are unable to be available for group work due to various limitations and constraint ranging from proper time management and failure for their colleagues to turn up for work. Otherwise, they thrive when they can work together, and do really have fun learning. Thus, some of them may have circled *disagree* based on their personal experiences as the ones indicated above.

Table 4.7, a two-way table, shows a distribution of responses to research question 1 items using bi-variate analysis (or cross tabulation). The table essentially provides two set of information: 1) that a slight majority of faculty believe that students

Table 4.7 Cooperative Learning Style v. Faculty Experience

			Number of Years Teaching			
		0-5 years	6-10 years	11-15 years	16 and over	
Cooperative Learning Style/Prefere nce	Strongly Disagree	3	1	0	2	6
	Disagree	2	5	6	2	15
	Agree	7	4	1	1	13
	Strongly Agree	3	1	2	0	6
Total		15	11	9	5	40

 $X^2 = 12.564$ ; df = 9; ns = not significant

of minority status possess a cooperative learning style/preference, and 2) that less experienced faculty are in the majority of those who agree. Thus, to determine whether faculty teaching experience at Gola University actually has any relationship with the perceptions of students of minority status possessing cooperative learning style/preferences, a Chi-square test is used.

The test statistic ( $X^2 = 12.564$ ,  $\alpha < 0.05$ ) value is less than the critical value ( $X^2 = 16.92$ ,  $\alpha = 0.05$ ). This means that there is no significant relationship between faculty experience and the perception that students of minority status have cooperative learning style/preference. This means more experienced faculty are no more knowledgeable about students of minority status having a cooperative learning style/preference than less experienced faculty, and that their knowledge is not significantly related to what they perceive about learning styles among students of minority status. However, this does not in any way mean that these learning styles/preferences do not exist. In fact Tables 4.5 and 4.6 show that they do exist.

Table 4.8 Group Study Learning Style v. Experience

			Number of Years Teaching			
		0-5 years	6-10 years	11-15 years	16 and over	
Group Study Learning Style	Strongly Disagree	4	1	0	2	7
1	Disagree	4	5	7	1	17
	Agree	5	5	1	2	13
	Strongly Agree	2	0	1	0	3
Total		15	11	9	5	40

$$X^2 = 12.286$$
;  $df = 9$ ; ns

Table 4.8 shows the response distribution among those faculty members who agreed or disagreed that students of minority status prefer group study learning style, based on their teaching experience. The result shows that they are split. The test statistic  $(X^2 = 12.286, \alpha < 0.05)$  is less than the critical value  $(X^2 = 16.92, \alpha = 0.05)$ , meaning that there is no significant relationship between teaching experience and faculty their perceptions on this issue. In fact, Table 4.8 shows that less experienced faculty members tend to agree more about the existence of group study learning style/preference among students of minority status than more experienced faculty.

Table 4.9 Small Group Discussion Learning Style v. Experience

			Number of Years Teaching			
		0-5 years	6-10 years	11-15 years	16 years and over	
Small Group Learning Style	Strongly Disagree	3	0	0	2	5
	Disagree	2	6	5	2	15
	Agree	8	5	2	1	16
	Strongly Agree	2	0	2	0	4
Total		15	11	9	5	40

$$X^2 = 15.25$$
;  $df = 9$ ;  $ns$ 

Regarding small group discussion learning style versus faculty experience, a large majority of faculty in the lower experience bracket agree that students of minority status do prefer small group discussion learning style. The test statistic from Table 4.9 shows that there is no statistically significant relationship between faculty teaching experience and small group learning style/preference. This is confirmed by the fact that the test statistic ( $X^2 = 15.25$ ,  $\alpha < 0.05$ ) is less than the critical value ( $X^2 = 16.92$ ,  $\alpha = 0.05$ ).

Table 4.10 Group Project Learning Style/Preference v. Experience

			Number of Years Teaching				
		0-5 years	6-10 years	11-15 years	16 years and over	Total	
Group Project	Strongly Disagree	2	0	0	2	4	
Learning Style	Disagree	6	6	7	2	21	
	Agree	6	5	1	1	13	
	Strongly Agree	1	0	1	0	2	
Total		15	11	9	5	40	

$$X^2 = 12.256$$
;  $df = 9$ ; ns

In Table 4.10, less experienced faculty are split evenly in their responses.

However, the result remains the same among more experienced faculty as in the previous tables: there is no relationship among the faculty teaching experience and faculty perception of group study learning style/preference.

Table 4.11 Personally Relevant Knowledge/Information Learning Style/Preference v. Experience

			Number of	Years Teaching		Total
		0-5 years	6-10 years	11-15 years	16 years and over	
Personally Relevant Knowledge/ Information	Strongly Disagree	2	0	0	0	2
	Disagree	2	1	1	2	6
	Agree	5	5	6	3	19
	Strongly Agree	6	5	2	0	13
Total		15	11	9	5	40

 $X^2 = 10.040$ ; df = 9; ns

Table 4.11 shows no statistically significant relationship between faculty teaching experience and faculty perception of personally relevant knowledge as a learning style for students of minority status. The test static ( $X^2 = 10.040$ ,  $\alpha < 0.05$ ) is less than the critical value ( $X^2 = 16.92$ ,  $\alpha = 0.05$ ). All the respondents agreed, however, on this learning

style/preference, except for 8. That is 80 percent *agree* and only 20% *disagree*. From the mean (3.07) and the standard deviation (0.829), it is obvious that this is a learning style that almost everyone identifies with. This supports claims that students of minority status are more prone to study those things that would improve their economic wellbeing after college and not just to acquire knowledge for the sake of learning.

Table 4.12 Relational Learning Style/Preference v. Experience

			Number of Years Teaching				
		0-5 years	6-10 years	11-15 years	16 years and over	Total	
Relational	Strongly Disagree	2	1	0	3	6	
Learning Style	Disagree	6	2	2	2	12	
Style	Agree	5	6	6	0	17	
	Strongly Agree	2	2	1	0	5	
Total		15	11	9	5	40	

 $X^2 = 14.709$ ; df = 9; ns

With regard to relational learning style/preference and faculty teaching experience, there is no statistically significant relationship. Both are completely independent of each other as with the previous culturally-based learning style and faculty teaching experience. However, it can be seen that at the lowest end (0-5 years), the response is split evenly. In the middle (6-10 years and 11-15 years), there is higher level of agreement. In total, 55 percent (a slight majority) of respondents agree that students of minority status prefer relational learning style (e.g., less competition or competitive environment).

To summarize findings on research question 1, the Chi-square tests used to determine whether or not there is a relationship between culturally-based learning styles and faculty teaching experience demonstrate that they are independent of each other.

More experience in teaching in the racially and ethnically diverse learning does not in anyway guarantee that faculty will know more about and appreciate the presence of culturally-based learning styles/preferences among students of minority. While the majority of the faculty agree that culturally-based learning styles exist, that knowledge is not limited by experience. What the two-way tables clearly show, however, is that less experienced faculty appear to demonstrate better knowledge about the existence of culturally-based learning style than their more experienced counterparts.

This finding is revealing, in that Inoue and Johnson (2000) obtained similar findings in their study entitled *Diversity and Multiculturalism in Higher Education*. Under their recommendation for further study (p.13), the authors ask the following questions: "Why are professors with more experience in the classroom less inclined to accept pluralism and diversity? Why are inexperienced faculty more open to incorporating multicultural pedagogic methodologies in their teaching than more experienced faculty?" These questions are worth pursuing in future studies.

# 4.2.2 Research Question 2

Next, to further address the research problem, research question 2 asked: "How has faculty experience with teaching in the racially and ethnically diverse classroom affected their choice and use of diverse teaching methods?" From this question a composite variable named *faculty perceptions of their choice and use of various teaching methods* was derived. Five items were used to address this variable. Table 4.13 below provides a frequency table to the affirmative (e.g., agree and strongly agree) to the questionnaire items addressing research question 2. The questionnaire items sought information from faculty on lecture, group discussions, student presentations, student group projects, and

field-based experiences (anything that has to do with outdoor learning), as appropriate pedagogies based on the review of literature, in percentages: 0-25 percent (%), 26-50 percent, 51-75 percent, and 76 and over. An abbreviated table of frequency distributions showing only the teaching methods is given below.

Table 4.13 Faculty Choices and Use of Diverse Teaching Methods (Total N=40)

Teaching methods	0-25%	26-50%	51-75%	75% and over
	Percent	Percent	Percent	Percent
Lecture	20	37.5	25	17.5
Small group discussions	45	42.5	12.5	0
Student presentations	60	25	10	5
Group projects	65	27.5	5	2.5
Field-based experiences	80	17.5	2.5	0

Table 4.13 shows that field-based (outdoor learning) is the least utilized (80 percent used it 0-25 percent), followed by group projects (65 percent used it 0-25% percent), student presentations (60 percent used it at 0-25%), small group discussions (45 percent used it at 0-25%), and lecture (20 percent used it at 0-25%). Between 26-50 percent of the time, small group discussion is mostly used (42.5 percent), followed by lecture (37.5 percent), group projects (27.5 percent), student presentations (25 percent), and field-based learning (17.5 percent). Between 51-75 percent of the time, lecture is used the most (25 percent), followed by small group discussions (12.5 percent), and student presentations (10 percent). At 75 percent and over, lecture is used the most, followed by student presentations (5 percent) and group projects (1 percent) respectively.

On average, lecture and small group discussions are the most utilized. This is not surprising, in that the lecture has historically been the most utilized of all pedagogies. It is important, however, that other teaching methods are also broadly used. The literature supports the use a variety of teaching methods (e.g. active learning/teaching methods) to support culturally-based learning styles/preferences in the racially and ethnically diverse classroom (Sandhu, 1994; De Vita, 2001). Table 4.14 shows strong association between *lecture* and *experience* ( $X^2 = 18.263$ , df = 9,  $\alpha < 0.05$ ). As can be seen, the use of lecture at the highest percentage level is spread across years of experience, and even more pronounced at the level of the most experienced faculty.

Table 4.14 Lecture Frequency v. Experience

			Number of Yea	ars Teaching	1	
		0-5 years	6-10 years	11-15 years	16 years and over	Total
Lecture	0 to 25%	1	1	5	1	8
Frequency	26% to 50%	7	5	2	1	15
	51 to 75%	4	4	2	0	10
	76% and over	3	1	0	3	7
Total		15	11	9	5	40

$$X^2 = 18.263$$
;  $df = 9$ ;  $p < 0.05$ 

According to Table 4.14, small group discussion has no relationship with experience. The critical value of Chi-square ( $X^2 = 16.92$ ,  $\alpha = 0.05$ ) is greater the test statistic ( $X^2 = 5.976$ ,  $\alpha < 0.05$ ). Also, at the higher percentage levels, small group discussion is rarely used by experienced faculty. When compared with faculty perceptions of variations in learning styles/preferences (research question 1), experience

the outcome of the test statistic are the same: small group discussion has no relationship to faculty teaching experience. One may also notice that at the 51 to 75 percent level of

Table 4.15 Small Group Discussion Frequency v. Experience

			Number of Yea	ars Teaching		
		0-5 years	6-10 years	11-15 years	16 years and over	Total
Small Group	0 to 25%	7	5	2	4	18
Discussion Frequency	26% to 50%	5	5	6	1	17
requericy	51 to 75%	3	1	1	0	5
Total		15	11	9	5	40

$$X^2 = 5.976$$
;  $df = 9$ ;  $ns$ 

use, no faculty member is involved. In other words, not even less experienced faculty, the only demographic group that is strong on the use of small group discussion as pedagogy, are using small group discussion (see Table 4.16).

Table 4.16 shows no relationship between small group student presentation and faculty teaching experience. The test statistic derived by the Chi-square test for the two-way table ( $X^2 = 10.858$ ,  $\alpha < 0.05$ ) is less than the critical value ( $X^2 = 16.92$ ,  $\alpha = 0.05$ ).

Table 4.16 Small Group Student Presentation v. Experience

			Number of Yea	ars Teaching		
		0-5 years	6-10 years	11-15 years	16 years and over	Total
Small Group	0 to 25%	7	7	5	5	24
Presentation Frequency	26% to 50%	3	3	4	0	10
Frequency	51 to 75%	3	1	0	0	4
	76% and over	2	0	0	0	2
Total		15	11	9	5	40

 $X^2 = 10.858$ , df = 9; ns

Therefore, teaching experience and the use of small group presentation as a viable teaching method in the racially and ethnically diverse classroom are independent of each other, are not related in a statistically significant way.

Table 4.17 Group Project Frequency v. Experience

			Number of Yea	ars Teaching		
		0-5 years	6-10 years	11-15 years	16 and over	Total
Group	0 to 25%	10	7	5	4	26
Project	26% to 50%	2	4	4	1	11
Frequency	51 to 75%	2	0	0	0	2
	76% and over	1	0	0	0	1
Total		15	11	9	5	40

 $X^2 = 7.757$ , df = 9; ns

Table 4.17 shows the same trend as in the two previous tables. The use of group project as a viable teaching method in the racially and ethnically diverse classroom is independent of teaching experience ( $X^2 = 7.757$ ,  $\alpha < 0.05$ ). The Chi-square test does not only confirm this, but a close inspection of rows 3 and 4 clearly demonstrates that fact. Table 4.17 shows that experienced faculty do not employ group project frequency at all.

Table 4.18 Field-based Experience Frequency v. Experience

			Number of Yea	ars Teaching		
		0-5 years	6-10 years	11-15 years	16 years and over	Total
Field-based	0 to 25%	12	9	7	4	32
Experience	26% to 50%	3	2	2	0	7
Frequency	76% and over	0	0	0	1	1
Total		15	11	9	5	40

 $X^2 = 8.056$ , df = 9; ns

Table 4.18 does not show any change from the previous trend. The use of field-based learning experience as a viable teaching tool is not dependent on faculty experience. The test statistic value ( $X^2 = 8.056$ ,  $\alpha < 0.05$ ) is less than the critical value of Chi-square ( $X^2 = 16.92$ ,  $\alpha = 0.05$ ). One thing that must be clarified, again, is that these various pedagogies are being employed in the classroom. However, there is no pattern that shows experience in teaching in the racially and ethnically diverse environment has any significant relationship with the use of field-based learning at all. Less experienced faculty, if anything tend to use field-based learning more. Therefore, the answer to research question 2 is that there is no relationship between faculty teaching experience with the racially and ethnically diverse classroom and the choice and use of diverse teaching methods. The Chi-square test on the two-way tables confirms independence of the variables.

## 4.2.3 Research Question 3

To address how teaching experience in the racially and ethnically diverse classroom has impacted faculty choice and use of multicultural course content, research question 3 asked: "How has faculty experience with teaching in the racially and ethnically diverse learning classroom affected their use of multicultural course content?" This question generated 4 questionnaire items. Table 4.19 shows the questionnaire items and the frequency distributions of faculty responses. The questionnaire items were preceded by the following stem: "My experience with teaching in the racially and ethnically diverse classroom context has prompted me to:"

The literature (Milem, 2001; Ofori-Dankwa & Lane, 2000; Inoue & Johnson, 2000; Maruyama & Moreno, 2000; Hyde & Ruth, 2002) says in fact faculty of minority

status are more likely to include issues of interest to racial and ethnic minorities, as well as provide more relevant course content in their teaching, something that racial and ethnic minorities do relate to. This claim was confirm by the frequency distributions of the responses and statistics (e.g., means and standard deviations). Table 4.19 shows that faculty include content on contemporary issues, as well as change course content to

Table 4.2.3.1 Faculty Choices and Uses of Multicultural Course Content (Total N=40)

Item			Rate	of Response (%)
	<u>N</u>	Mean	<u>S.D.</u>	
include course content that addresses more contemporary issues that are relevant to student of color (racially/ethnically diverse students).	32	2.95	0.876	80
change course content to encourage discussion among students	31	2.975	0.767	80
include course content that addresses diverse historical issues that are relevant to students of color.	29	2.95	0.904	72.5
include course content that consists of readings by authors whose races and/or ethnicities are represented within the racial composition of my students.	21	2.55	1.01	52.5

encourage discussion. This was confirmed by several faculty members. One said, "I make content relevant to students in order to kept them motivated and excited about learning. Student learn better when content is more relevant and exciting to them. That does not mean making it easy for them; it means addressing issues that are or will be significant to their lives, their families, their friends. Don't we all?" She concluded.

Table 4.19 also shows that faculty use multicultural course content in a variety of ways. However, using course content in a way that addresses issues of contemporary social concerns and in a way to encourage discussion in class rate the highest (80 percent), followed by historical issues of relevance to students of minority status (72.5 percent). Of course a slight majority of respondents (52.5 percent) use works of authors whose races and/or ethnicities are represented in the composition of students. Also of interest for this particular analysis are the Central Tendencies of mode and median. For all of the items, the modes and medians were identical (3.0). This shows the high level of agreement among responses.

**Table 4.20 Use of More Contemporary Examples v. Experience** 

			Number of Years Teaching					
		0-5 years	6-10 years	11-15 years	16 years and over			
Uses More Contemporary Examples	Strongly Disagree	2	2	0	0	4		
	Disagree	0	1	2	1	4		
	Agree	8	4	6	4	22		
	Strongly Agree	5	4	1	0	10		
Total		15	11	9	5	40		

$$X^2 = 10.079$$
;  $df = 9$ ;  $ns$ 

Table 4.20 shows how the responses are distributed across the various levels of experience. However, there is no special pattern that indicates any dependency upon experience. What we see is data that are evenly spread across the whole range of years of experience in teaching at the racially and ethnically diverse classroom. While the questionnaire items are led by a stem that emphasizes experience as the main factor in

their use of contemporary issues in their teaching, both less experienced and more experienced faculty have even distribution of responses. The Chi-square test also shows that the use of contemporary material of relevance to students of minority status and faculty teaching experience are independent of one another. This is demonstrated by the fact that the test statistic ( $X^2 = 10.079$ ,  $\alpha$  0.05) is less than the critical value of Chi-square ( $X^2 = 16.92$ ,  $\alpha = 0.05$ ). As in previous results, experience may not be a necessity to know the value of addressing contemporary issues relevant to students of minority status in the classroom.

However, the interview data confirmed that faculty members are committed to ensuring that students at Gola University are engaged in learning more about their world vis-à-vis their diverse classmates and peers. Several faculty members indicated that their learning environment, because of its diversity, provides a unique opportunity for them to provide a college education that is superior in that it prepares their students to become global citizens. One male, Asian faculty member said, "I believe we provide top-notch education here than at most places. We teach a diverse curriculum to a microcosm of the world right here. That does not happen in many places. But more than that, our students are prepared to work and live anywhere in the world because they learn how to relate to different colleagues here."

This also means that students are taught with a collective objective that all professors – both new and old – have adopted. It is an objective that drives their use of course content rather than the duration of their teaching experiences.

Table 4.21 Use of Authors with Same Race/Ethnicities as Students v. Experience

			Number of Years Teaching				
		0-5 years	6-10 years	11-15 years	16 years and over		
Uses Authors with Same Race/ethnicity as Students	Strongly Disagree	2	3	2	0	7	
	Disagree	2	3	2	5	12	
	Agree	7	2	4	0	13	
	Strongly Agree	4	3	1	0	8	
Total		15	11	9	5	40	

 $X^2 = 15.185$ ; df = 9; ns

Table 4.21 shows no dependency as well. The test statistic ( $X^2 = 15.185$ ,  $\alpha < 0.05$ ) is again less than the critical value of Chi-square ( $X^2 = 16.92$ ,  $\alpha = 0.05$ ), and demonstrates that there is no statistical significance. What is obvious, also, is that fewer faculty include course content that focuses on minority authors. This is especially true for the more experienced faculty members. In fact none of the 5 faculty members that have 16 years or more experience in teaching do include minority author-related content in their teaching. But in the 11-15 years experience range, the responses are equally split (4 disagree and 5 agree). The same is true for 6-10 years of experience: the responses are evenly split (6 disagree and 5 agree). Less experienced faculty (0-5 years) instead use a significant amount of minority authored content in their teaching. This finding is the same in Inoue and Johnson's (2000) study that was mentioned earlier.

Even though using historical examples of interest to students as content, and experience in teaching may be a viable thing to do as indicated by faculty who were interviewed, faculty did not say that experience had any role to play in their involvement in such a practice. As Table 4.22 shows, a good number of faculty do use diverse historical examples as course content while some do not.

Table 4.22 Use of Diverse Historical Examples Relevant to Students v. Experience

			Number of Years Teaching					
		0-5 years	6-10 years	11-15 years	16 years and over			
Uses Diverse Historical Examples	Strongly Disagree	2	1	0	0	3		
	Disagree	1	2	4	1	8		
	Agree	5	3	5	4	17		
	Strongly Agree	7	5	0	0	12		
Total		15	11	9	5	40		

$$X^2 = 15.185$$
;  $df = 9$ ;  $ns$ 

The Chi-square test for the two-way table (see Table 4.22) rules out any dependency or statistically significant relationship between years of teaching experience and the use of diverse historical examples of interest to students of minority status in course content, even though it may be a good practice. The test statistic ( $X^2 = 15.185$ ,  $\alpha < 0.05$ ) is less than the critical value of Chi-square ( $X^2 = 16.92$ ,  $\alpha = 0.05$ ). Notwithstanding, Table 4.23 shows that faculty overwhelmingly agree that they deliberately change course content in order to encourage discussion in class. Again, the

Table 4.23 Changing Course Content to Encourage Discussion v. Experience

			N 1 (V T 1)					
			Number of	Years Teaching		Total		
		0-5 years	6-10 years	11-15 years	16 years and over			
Changes Content to Encourage Discussion	Strongly Disagree	2	0	0	0	2		
	Disagree	1	1	3	1	6		
	Agree	8	6	5	4	23		
	Strongly Agree	4	4	1	0	9		
Total		15	11	9	5	40		

 $X^2 = 17.123$ ; df = 9; p < .05

interview data support this fact. Several professors indicated that teaching in a racially and ethnically diverse classroom is challenging, in that they must be sensitive to the mood of their classrooms constantly, and that may involve changing course content to seize students' attention and interest.

Thus, the course content change is more about applying the right effort and sensibilities to keep the students engaged all the time, rather than attempting to water down content. Because all of Gola University faculty are trained to develop this kind of awareness and sensibility, it is not surprising faculty overwhelmingly agree on the changing of course content often to encourage discussion (see Table 4.23).

Therefore, to answer research question 3, faculty use of diverse course content is not dependent on their experience as professors at Gola University. Rather, faculty intentionally use diverse course content is because of their awareness of the need and importance to use those diverse course content.

# 4.2.4 Research Question 4

The roles that faculty play in the classroom are critical to learning. The way faculty view their role(s) determines whether or not they will be effective in the classroom. In order to assess how faculty at Gola University view their roles in the classroom based on their experience teaching there, research question 4 asks: "How has faculty experience with teaching in the racially and ethnically diverse classroom affected their perception of their roles in the classroom (e.g., facilitator, collaborator, and coach)?" To answer this question, 3 questionnaire items were derived. All of the 3 questionnaire items are preceded by this stem: "My experience with teaching in racially and ethnically diverse

classrooms has introduced me to culturally-based learning styles that have prompted me to:" This stem makes it clear to the respondent whether or not his/her experience is a determinant of how he/she views his/her instructional roles in the racially and ethnically diverse classroom

Table 4.24 Variable: Faculty Perceptions of Their Roles in the Classroom (Total N=40)

<u>Item</u>			Rate o	of response_(%)
	<u>N</u>	Mean	<u>S.D.</u>	
view my role primarily as a facilitator	37	3.4	0.632	92
view my role primarily as a <i>collaborator</i> in the learning process	32	3.075	0.828	80
view my role primarily as a coach	34	3.22	0.767	95

Table 4.24 shows that nearly all faculty members see their roles in the learning process as facilitator, collaborator, and coach. To further show how agreeable faculty are, the mode for facilitator is 4, for collaborator is 3, and it is 3 for coach. The medians of the results are, 3, 3, and 3 respectively.

These results are supported by the interview data. In asking what, if anything, have faculty done to contribute to the success of the diversity program at Gola University, all the faculty that were interviewed indicated that it required commitment to be an effective professor at Gola University. One female (White) professor said, "To be successful or effective, a faculty member has to see himself/herself as an ethnic being, and must willing to relate to each student at that their level. We are not only teachers, we learn everyday from our students; therefore, we are learners as well, and will continue to

be." What was learned from the interviews is that teaching at Gola University requires a different way of thinking about higher education. It requires a different mindset: one must be humble, and one must be committed. Thus, it is no surprise that the responses heavily favor the roles of facilitator, collaborator, and coach.

In comparing response distribution across years of experience, Table 4.25 shows that faculty view of their role as facilitator is independent of their teaching experience. The value of the test statistic ( $X^2 = 15.678$ ,  $\alpha < 0.05$ ) is less than the critical value of Chisquare ( $X^2 = 16.92$ ,  $\alpha = 0.05$ ). As already indicated, faculty view of their role is commitment-driven, rather experience-driven. This commitment has led to faculty being sent to conferences and roundtable presentations at Cornell University, Harvard, among others, to learn more about handling and working diversity. Faculty at Gola University express pride in their mission to produce global citizens. Everyone takes pride in it, and not just the most experienced, as indicated in Table 4.24 and Table 4.25.

Table 4.26 View of Role as Facilitator v. Experience

			Number of Years Teaching					
		0-5 years	6-10 years	11-15 years	16 years and over			
View Role as Facilitator	Disagree	0	2	0	1	3		
1 dominator	Agree	10	0	5	3	18		
	Strongly Agree	5	9	4	1	19		
Total		15	11	9	5	40		

 $X^{2} = 15.678$ ; df = 9; ns

Also, faculty at Gola University do not necessarily see experience in terms of time. As one of them said in an interview session with her, "It is what you do, not what you look like or how long you have taught." Experience may mean the knowledge

acquired through collective or individual effort to make one a more sensible and better faculty member, realizing that he/she is an ethnic person who must know himself/herself and those he/she works with.

Table 4.27 shows that faculty perceive their role as collaborators, but more as a facilitator (see Table 4.26). Even though they may see themselves as co-learners, they recognize that they are guiding the process and monitoring it. That fits better with the facilitator role than the collaborator. Collaborator indicates equality and partnership. Considering the role of the professor, that is not quite the case. As the learn together, they, the professors, lead the way and do everything to remove hurdles and barriers

Table 4.27 View of Role as Collaborator v. Experience

			Number of Years Teaching					
		0-5 years	6-10 years	11-15 years	16 years and over			
View Role as Collaborator	Strongly Disagree	0	0	0	2	2		
Conasorator	Disagree	2	1	2	1	6		
	Agree	9	6	3	1	19		
	Strongly Agree	4	4	4	1	13		
Total		15	11	9	5	40		

 $X^{2} = 17.308$ , df = 9; p < .05

that may potentially be harmful to accomplishing the learning goals. In other words, they view students as equals, but at another dimension, they are their teachers and guides. The test statistic ( $X^2 = 17.308$ ,  $\alpha < 0.05$ ) is greater than the critical value of Chi-square ( $X^2 = 16.92$ ,  $\alpha = 0.05$ ). Hence, there is dependency between faculty view of the role as collaborators in the learning process and faculty teaching experience.

According to Table 4.28, the role of coach is also well accepted among faculty at Gola University. This is true among faculty members at all experience levels. However, the two-way table generates a test statistic ( $X^2 = 17.889$ ,  $\alpha < 0.05$ ) that is significant, as is greater than the critical value of Chi-square ( $X^2 = 16.92$ ,  $\alpha = 0.05$ ). The test shows a strong association between faculty perception of their role as coach and their experience. But as in the previous cases, it is all about commitment and a mindset. Faculty members know what their role is, and they are committed to fulfilling it at the highest level.

Table 4.28 View of Role as Coach v. Experience

		1	Number of Years Teaching					
		0-5 years	6-10 years	11-15 years	16 years and over			
View Role as Coach	Strongly Disagree	0	0	0	1	1		
	Disagree	2	2	1	0	5		
	Agree	10	1	4	3	18		
	Strongly Agree	3	8	4	1	16		
Total		15	11	9	5	40		

$$X^2 = 17.889$$
;  $df = 9$ ;  $p < 0.05$ 

In answering research question 4, it is observed that experience does not play a significant role in faculty view of their roles as facilitator and collaborator in the learning process in the racially and ethnically diverse classroom. If anything, the kind of experience that is required is not in years of teaching. Based on the interview data, faculty at Gola University, as has already been indicated, may view experience as the investment that is made personally and collectively to issues of racial and ethnic diversity. In terms of faculty view of their role as coaches, there is strong dependence between that perception of that role and their teaching experience.

# 4.2.5 Research Question 5

Research question 5 asks: "How has faculty experience with teaching in the racially and ethnically diverse classroom affected their choices and uses of evaluation methods?" To answer this question, 5 questionnaire items were derived via the literature review. These questionnaires were preceded by a stem, *In my student evaluations*,. Table 4.29 below shows a frequency distribution of faculty responses to the questions, and the mean and standard deviations associated with each. Unlike the straight Likert-type questions that were asked in previous items, except for the *choice of use of teaching methods*, respondents were asked to select the extent to which they use the evaluation methods listed in Table 4.29 with following scales: 1 – Rarely; 2 – Sometimes; 3 – Most of the time; and 4 – Always.

Table 4.29 Variable: Faculty Choices and Uses of Evaluation Methods (Total N=40)

Item				Rate of response	(%)
	N	<u>Mean</u>	<u>S.D.</u>		
I use objective tests (quantitative, yes-no, a, b, c measures).	24	2.6	1.128	60	
I use individual student projects.	23	2.8	1.0178	45	
I use individual student presentations in class.	12	2.42	1.06	30	
I use group projects.	15	2.10	0.955	57.5	
I use group presentations in class.	18	2.20	1.0178	45	_

Other important statistics were the modes and medians for these questions. The mode and median for the use of objectives tests were 3.0 and 3.0 respectively; the mode

and median for the use of individual student projects were 3.0 and 2.0; the mode and median for the use of individual student presentations were 2.0 and 2.0; the mode and median for the use of group projects were 2.0 and 2.0; and the mode and median for group presentations in class were 2.0 and 2.0.

From Table 4.29, it can be seen that faculty members use objective tests and individual student project most of the time, followed by group presentations in class, use of group projects, and, lastly, individual student presentations. It is important to note that faculty use broad evaluations methods. Coinciding with the need to use diverse pedagogies to in the racially and ethnically diverse classroom environment to meet the need for various culturally-based learning styles, broad use of evaluation method is in order. Because experience is used to evaluate faculty use of these evaluation methods, two-way tables (or contingency) tables are provided to investigate whether or not there is significant relationship or dependence between the two variables.

Table 4.30 Use of Objective Tests v. Experience

		Number of Years Teaching						
		0-5 years 6-10 years 11-15 years over						
Use of Objective Tests to Evaluate Students	Rarely	3	0	4	3	10		
	Sometimes	3	2	1	0	6		
	Most of the time	4	5	3	2	14		
	Always	5	4	1	0	10		
Total		15	11	9	5	40		

$$X^2 = 11.489$$
,  $df = 9$ ; ns

Table 4.30 shows a good spread of faculty responses to their use of objective tests to evaluate their students. However, the value of the test statistic ( $X^2 = 11.489$ ,  $\alpha < 0$ ) is

less than the critical value of Chi-square ( $X^2 = 16.92$ ,  $\alpha = 0.05$ ), thus rejecting the probability of dependency between faculty use of objective tests and faculty experience in teaching in the racially and ethnically diverse classroom.

Table 4.31 Use of Individual Student Projects to Evaluate v. Experience

		Number of Years Teaching						
		0-5 years	6-10 years	11-15 years	16 years and over			
Use of Individual Student Projects to Evaluate	Rarely	3	1	0	0	4		
	Sometimes	5	1	5	2	13		
	Most of the time	4	2	3	1	10		
	Always	3	7	1	2	13		
Total		15	11	9	5	40		

 $X^2 = 12.203$ , df = 9; ns

Regarding the use of individual student projects to evaluate students, Table 4.31 shows a good spread of its use. No one group, in terms of experience, claims to use this evaluation method more. However, there is no relationship between the use of individual students projects and faculty teaching experience. The value of the test statistic ( $X^2 = 12.203$ ,  $\alpha < 0$ ) is less than the critical value of Chi-square ( $X^2 = 16.92$ ,  $\alpha = 0.05$ ).

Table 4.32 Use of Individual Student Presentations to Evaluate v. Experience

		Number of Years Teaching						
		0-5 years	6-10 years	11-15 years	16 year and over			
Use of Individual Student Presentations to Evaluate	Rarely	3	1	1	4	9		
	Sometimes	6	3	3	1	13		
	Most of the time	4	4	2	0	10		
	Always	2	3	3	0	8		
Total		15	11	9	5	40		

 $X^2 = 13.668$ , df = 9; ns

Table 4.32 shows that at the highest end of the experience level, student presentations is not used by faculty to evaluate students. However, the use of this evaluation method is evenly used over the three other experience levels. This two-way table does not give any dependency or relationship between the faculty use of individual student presentations to evaluate and faculty teaching experience. The value of the test statistic ( $X^2 = 13.668$ ,  $\alpha < 0.05$ ) is less than the critical value of Chi-square ( $X^2 = 16.92$ ,  $\alpha = 0.05$ ).

Table 4.33 Use of Group Project to Evaluate v. Experience

			Number of Years Teaching						
		0-5 years	0-5 years 6-10 years 11-15 years over						
Use of Group Projects to Evaluate	Rarely	4	3	1	4	12			
	Sometimes	6	5	4	1	16			
	Most of the time	3	2	3	0	8			
	Always	2	1	1	0	4			
Total		15	11	9	5	40			

$$X^2 = 8.45$$
,  $df = 9$ ;  $ns$ 

One thing that is seen at the higher end of the experience level in Table 4.32 and Table 4.33 is the lack of use of individual student presentations and group projects as evaluation methods respectively. Otherwise, the use of these methods is evenly spread across the other experience levels. Nonetheless, the use of group projects to evaluate students and faculty teaching experience does not show any relationship whatsoever. The value of the test statistic ( $X^2 = 8.45$ ,  $\alpha < 0.05$ ) is less than the critical value of Chi-square ( $\alpha = 16.92$ ,  $\alpha = 0.05$ ).

Table 4.34 Use of Student Group Presentation to Evaluate v. Experience

		Number of Years Teaching						
		0-5 years	6-10 years	11-15 years	16 years and over			
Use of Student Group Presentation to evaluate	Rarely	5	2	1	4	12		
	Sometimes	4	5	3	1	13		
	Most of the time	4	1	5	0	10		
	Always	2	3	0	0	5		
Total		15	11	9	5	40		

 $X^2 = 8.45$ , df = 9; ns

Again, Table 4.34 shows a deficit in the use of student group presentation to evaluate students at the highest end of the experience level. And in the same way as Tables 4.32, and 4.33, its use is evenly spread across the other experience levels. Also, the faculty use of student group presentation to evaluate has not relationship with faculty experience. Although there is a pattern between the last three tables, it does not prove any dependency.

Therefore, to answer question 5, in relation to experience being a factor in the use of evaluation methods, three is no dependency. It is also seen that more experienced faculty stay away from group project and individual student presentations evaluations. As mentioned earlier on in this analysis, several faculty members knew that students of minority status preferred small group learning styles/preferences, but had had complaints over and over from students that they did not want to be involved in group work due to physical limitations, i.e. colleagues would not do their portion of the work, they themselves never had time to make group meetings for various reasons, and because it was more convenient for them to be assigned individual work because, then, they would

find time even at odd hours at home to do them. Therefore, the fact that faculty, especially more experienced faculty, did not respond affirmatively with the use of group-related activities on the survey to evaluate students, is inadequate information. It must be remembered that the more experienced knew these circumstances that surround the assignment of group work to minority students. Nevertheless, we find an even spread of the use of diverse evaluation methods between the following experience levels: 0-5 years; 6-10 years; and 11-15 years. In a way, this spread is a better view of the reality regarding group work.

# 4.3 Impact of Demographics: Gender, Race/Ethnicity and Faculty Disciplines

Although demographics are not the key dependent variables, their relative affects on the outcomes of this study ought to be known. According to the literature, faculty members of minority status are more likely to include multicultural content in their teaching (Inoue & Johnson, 2000; Milem, 2001). Female faculty members are known to include multicultural course content as well. Therefore, the assessment of the influence of demographics is helpful in our understanding of the outcome of this study. However, the assessment of the affects of demographic variables are done and displayed in Table 5.1 in chapter 5. Table 5.1 is a correlations matrix which provides information that informs the summarizing of this study. This way was determined as the best way to do it because it takes all the composite variables into account. The purpose of Table 5.1 is to identify affects of all the variables that are used in this study on one another, which include the composite dependent variables, the main independent variable, and faculty demographics.

# **5.0 SUMMARY AND DISCUSSION**

#### 5.1 INTRODUCTION

This chapter describes the results of the research, including a summary of how the variables were constructed. This chapter also discusses race/ethnicity and gender and their relative impacts. Furthermore, this chapter tests for significance in relationships among dependent variables and describe the results. Table 5.1, a correlations matrix table, provides that information.

Furthermore, this chapter discusses the findings of this study, both of the survey and interviews, in detail and all their implications. The discussion section summarizes the purpose of the study and addresses whether and how the goals of the study were achieved. Finally, the discussion section addresses what the researcher learned from doing the study, the limitations of the study, and makes recommendations for further study.

# 5.2 Summarizing the Results

As indicated in the research design, data for this study were collected from faculty members (N=40) of Gola University's traditional program using surveys and follow-up interviews (N=15). The data for this study were primarily analyzed using Descriptive Statistics. The analysis consisted of five dependent composite variables that were entified

as significant to the fulfillment of the goals of this study. They were based on faculty perceptions of their teaching experience at Gola University, one of the most racially and ethnically diverse higher education institutions anywhere in the continental United States (over 47 percent of racial minority). These variables are: variations in learning styles, use of various teaching methods, choice and use of courts content, faculty roles in the classroom, and choices and uses of evaluation methods. Beside analyzing each item associated with each composite variable and determining how faculty teaching experiences impacts it, each composite variable has a final value that is determined by summing all the scale scores constructed from the questionnaire items assigned to it (Agresti & Finlay, 1997; Babbie, Halley, & Zaino, 2000; Weidman & Stein, 2003). Values for composite variables were determined for use in correlational and regression analyses. The correlational analysis (see Table 5.1) made it possible determine how each of these dependent variables and dummy variables such race/ethnicity, gender, and faculty disciplines, are correlated with each other.

The identification of each dependent variable was carefully done through the review of the literature (see methodology) and they were determined as significant to fulfilling the purpose of this study. From this knowledge, the research questions were derived to address the research problem. From further review of the literature, questionnaire items were constructed to address each research question and its dependent variable. Scales were then developed to assess responses to each of the questionnaire items for each variable. Frequency distribution tables were used to show the response rate on each of the items on the survey questionnaire. To better understand the relationship

between faculty teaching experience and all the dependent variables, cross-tabulations were performed to obtain two tables that that show exactly how the relationships.

Because the primary goal of this study was to use faculty teaching experience in the racially and ethnically diverse learning environment to assess the impact of racial and ethnic diversity on faculty instructional roles, this study performed tests of significance using Chi-Square measure measures to determine whether there were relationships of any significance between faculty experience and all the dependent variables, and those results have been provided in chapter 4. What those tests showed is that, except for faculty use of lecture as pedagogy and faculty view of role as collaborator in the learning process, faculty teaching experience did not have any significant impact on the other variables, namely, faculty perceptions of learning styles/preferences, faculty view of their roles in the classroom, faculty use of diverse course content, and faculty use of diverse evaluation methods.

Table 5.1 is a correlation matrix table that seeks to further examine whether there are correlations among eight variables, five of which are composite variables. The three other variables are faculty teaching experience, which is the independent variable, and two faculty demographic variables, namely race/ethnicity and disciplines. Faculty choice and use of multicultural course content and variations in learning styles/preferences were significantly associated. Faculty view of their roles in the classroom is significantly associated with variation in learning styles/preferences, but negatively associated with the use of diverse teaching methods.

Table 5.1 Correlations Among Dependent and Independent Variables (N=40)

Variables	1	2	3	4	5	6	7
1. Variation in learning styles/preferences						_	_
2. Use of various teaching methods	13						
3. Choice and use of multicultural content	.44*	117					
4. View of roles in the classroom	.44*	283*	.019				
5. Choices and uses of evaluation methods	.30*	.061	.018	.310	*		
6. Race/ethnicity	076	.120	.380*	022	037		
7. Disciplines	134	089	211	.006	034	.334*	
8. Faculty Teaching Experience	130	262*	067	133	166	358*	.089

\*p < .05

Faculty choices and uses of evaluation methods correlated with variations in learning styles, as well as faculty perception of their role in the classroom. Race/ethnicity is significantly correlated with faculty choice and use of multicultural course content in their teaching. This finding is supported claims by several authors that race and ethnicity are associated with faculty use of multicultural course content (Fjortoft, 1993; Inoue & Johnson, 2000; Ofori-Dankwa & Lane, 2000; Milem, 2001). Also, an interesting correlation is found to exist between faculty members' disciplines and race/ethnicity. This strong correlation is perhaps a function of faculty responses associating them with certain disciplines. Finally, faculty teaching experience has strong negative correlation with discipline. This may be that most majority of the faculty at Gola University have less experience teaching there. As indicated earlier on, this was necessitated by faculty turnover in the 1990's. When commitment to racial and ethnic diversity was renewed, and the president mandated the hiring of more faculty of minority status, some faculty members who felt uncomfortable with that level of commitment to diversity resigned. As a result, more new faculty who bought into the mission of the institution and the leadership's renewed commitment were hired.

## **5.3 DISCUSSION**

The central purpose of this study was to determine how culturally-based learning styles/preferences, as a challenge posed by the racially and ethnically diverse classroom (Anderson, 1989; Sandhu, 1994; De Vita, 2001), impacted faculty instructional roles from faculty viewpoint. In conceptualizing the study, faculty teaching experience in racially and ethnically diverse settings, particularly Gola University, was identified as a critical variable in assessing that impact. The use of faculty experience was based on several factors: 1) Trigwell and Shale (2004), in their model of the Scholarship of Teaching, have demonstrated that context knowledge is a critical asset to faculty in the choices and uses of pedagogy. Effective faculty members use knowledge of the classroom context as a tool to enable them to implement instructional goals and objectives. While some degree of knowledge of context may be had through serendipity, however, this study assumed that prolonged experience with context provided enough familiarity and exposure that led to adequate understanding of the dynamics of the context and the prevailing needs and opportunities every context provides. Faculty teaching experience in the racially and ethnically diverse setting was therefore assumed to be a necessary precondition for faculty to understand their context and to enable them to prepare the appropriate pedagogical responses that would make them more effective in their various instructional roles. 2) Also, faculty teaching experience made it possible to know whether experience really matters, because there is a debate in the scholarly community about whether experience really matters in faculty reactions to racial and ethnic diversity. In this debate, Milem (2001) and others claimed that tenured faculty (e.g., same as more experienced faculty in this study) were more supportive of diversity,

while Inoue and Johnson (2000) found in their study of faculty reaction to diversity that less experienced faculty were more favorably disposed to diversity. The findings of this study clearly supports Inoue and Johnson's (2000) finding that while faculty members in racially and ethnically diverse learning environments are aware of and impacted by challenges posed by the presence of culturally-based learning styles/preferences, years of experience teaching in such an environment do not necessarily affect in a significant way how faculty view their roles and the pedagogical decisions they make day-by-day. However, the interview data show that experience does not count in years only. Among the faculty at Gola University who participated in the follow-up interview to this study, it was clarified that while years of experience may count in some instances, it was the level of commitment to diversity that matters. Most of them argued that while they were few years in their teaching career there, they were more committed to racial and ethnic diversity - a source of racial and ethnic reconciliation - than some persons who had taught there longer but had no such commitment. This commitment is evidenced in this transcript of an interview with a Latina faculty member, when she was asked this question: "Have faculty had to play any particular role to make the diversity program work?"

I have taught a diversity course for 3 years now. This course is called First Year Studies Course. The goal is to make students aware academically, but also socially and culturally. It is offered in the freshman year. It focuses also on how students view themselves and others. Besides, I am involved with chapel, and Latino students as a mentor. Like other faculty members, I have invited students into my home, just to get to know me as well as to get to know them. But the most important thing is for faculty to work together to meet the needs of students.

Furthermore, many of Gola University's faculty referred to experience as having a personal dimension when it came to racial and ethnic diversity. One professor aptly

described that as the recognition of being a cultural-ethnic being. This personal dimension of experience leads to the faculty member striving to know himself/herself better vis-à-vis reflection on personal life experiences, attempting to view himself/herself through the experiences of others, and, as a result, developing the capacity to understand where racial and ethnic students come from and the experiences they go through. This kind of understanding produces a personal transformation that leads to the development of certain sensibilities that are necessary in teaching in the racially and ethnically diverse context. It is that kind of experience that affects faculty instructional roles, because a transformed person, who recognizes himself/herself as an ethnic being, cares about ethnic issues more than a person who cannot "connect" with the issues because of limited experience. That does not mean, however, that intellectual knowledge does not count in equipping faculty members to become effective in racially and ethnically diverse settings. In fact, quite the opposite is true.

As discussed under the context section, when Gola University decided to recommit itself to the vision of its founder to provide quality higher education to the less fortunate members of the world in the 1970's, it first embarked on a campaign of sending its faculty to diversity-related conferences, multicultural roundtables, and various workshops at Cornell, Harvard, among others, to prepare them intellectually for the task. These faculty members returned and trained their colleagues and the administration in the knowledge that they needed to cultivate and sustain their commitment to racial and ethnic diversity. But, as faculty mentioned in the follow-up interview section, having a knowledge that resides at the head alone is not enough. "That knowledge must be translated into personal commitment to equipping oneself into an cultural-ethic being that

cares about and is committed to what they do, because they understand the stakes, namely, you have credibility with students to be effective. Without that credibility – being able to related to them, being able to talk like them at times – they will not connect," one faculty member stated.

Therefore, in a way, experience matters and has impact on faculty instructional roles. That experience is, however, divided into various dimensions: the intellectual, the personal, and the relational. The conferences, workshops, and roundtables comprise the intellectual experience. They equip one with the knowledge that they need to use to move to the next level, namely, recognizing oneself as an ethnic being and going through a personally transforming process to develop the needed sensibilities of caring, of understanding the minority-experience, and the comfort level required to discuss minority issues. Rothschild (2003) refers to this as a credibility issue. In other words, when a faculty member who has never had an experience as a racial minority teaches students of minority status, they do not consider him/her to be credible. To become credible, he/she must show commitment to racial and ethnic diversity in ways that are visible to students of minority status. And lastly, relational experience is also important. Relational experience comes when one is willing and ready to cross racial and ethnic lines and engage and get to know the "other" and appreciate who they are, as one professor put it. She continued:

You are not ready to teach in a diverse classroom unless you understand what those kids go through not just in the head, but in the heart. You need to be able to feel comfortable with them, because you can talk like them, and because you are real and not a fake. Teaching in a place like this, I must admit, is not for every faculty member. That is the reason why many of our colleagues had to leave.

In seeking to understand other challenges that faculty teaching in such a context face, this question was asked, "What special effort you have had to exert in your teaching because of diversity?" Faculty were very forthcoming. One faculty member said this:

I have to make sure that no one is pretending about anything in class. I make sure that students can talk freely about their families, their own struggles as they grew up, some of the challenges they still face because of their backgrounds. This is like a catharsis for some. It makes them feel comfortable with who they are and enable them to build confidence that helps to catapult the performance. This is definitely a challenge, because unless students are comfortable with you, you cannot get them to share anything.

In terms of differences in backgrounds and how challenging it can be for some students to be honest about and appreciate of their differences, this faculty member continued:

One of my goals, which I call a challenge, is I want my students to know that they do not need to become like someone else. Rather, they should appreciate themselves and their differences. They are ok-ed. At the same time, I must help them to identify our commonalities as humans and be able to appreciate and celebrate them. Finally, I have to always, above everything, try to help students to believe that the world they live in belongs to other people too, and that is okay.

In regard to how faculty composition affects the atmosphere on campus, it was found that even though the number of White faculty exceeded minority faculty by nearly 2 to 1, most of the White faculty members had cross-cultural experiences that prepared them for their roles. Some White faculty members were first-generation college graduates as well, who came from similar backgrounds as many of the racial and ethnic minority students represented. One of the professors addressing this issue said:

Almost all of us are culturally intelligent. Many of us, especially White faculty, have lived and taught college abroad. I lived and taught in the Carribean for 15 years. I was a minority, and I learned what it means to be isolated and how it feels. I know what it means to be limited by language, as some of us may be. I can relate them at almost every level. So, for most of us, being white does not matter at all. They trust us.

Faculty were also asked to express their opinions on claims that racial and ethnic diversity affect academic quality: "What do you think about the claim that academics suffer when racial and ethnic diversity is implemented?" This question has caused a debate to ensue about the cost of diversity. Richardson and Skinner (1990) addressed this issue very extensively, using a model that recommends exactly what actions are required to prevent the affects of racial and ethnic diversity on academic quality. Moore (2004) have lamented that most colleges seek to recruit intelligence instead of needy students who have been shafted by society. To that question, faculty was adamant about the controls that they have ensured that the university put in place. As a result, they disagree with that claim. One faculty put it like this:

First, when we recruit students, we look for potential. We also look for talents and willingness and the drive to succeed. So we conduct interviews and screening. The screening enables us to know more about the student's family, problems that led them to struggle with some subjects in high school. After that, they are put in a program that helps them to prepare for regular academic work. Some of the students may enter directly into normal coursework. But we have accreditation standards that are important to us, so we do not allow academic quality to drop. Therefore, I do not agree with that statement. If anything, we educate better here than more places. Diversity-related education, in my opinion, is the best education one can receive in a diverse world.

So it is not only that faculty are prepared at the intellectual, personal, and relational level, they have earned what I would call credibility capital that they are proud of. It enables them to be effective. White faculty members possess cross-cultural intelligence, and faculty of minority status have that knowledge by experience. But also, the university is strong on continuing training of faculty to equip them to be more effective. In terms faculty quality, it is very high. Most of Gola University's faculty have

earned terminal degrees. They have some Ivy Leaguers as faculty. Therefore, issues of academic quality are considered very seriously.

Finally, while this study shows that faculty teaching experience is independent of their perceptions of learning styles/preferences, faculty recognized that culturally-based learning styles exist (Anderson, 1989; Sandhu, 1994; De Vita, 2001). The survey and the interview data show that many faculty members attempt to teach to their students' learning styles/preferences. As they have indicated, commitment is important to them, and teaching in the racially and ethnically diverse context is not for everyone. For them, it is something they enjoy because of value that they associate with diversity.

However, this study shows significant inter-variable correlations, even though faculty teaching experience is not significantly correlated with any of the essential variables. Because faculty teaching experience is negatively correlated with all variables except disciplines, faculty teaching experience does not have a direct impact on these variables (see Table 5.1). This means that faculty do not need years of experience to be disposed to using diverse teaching methods (Inoue & Johnson, 2000), use of multicultural course content, diverse evaluation methods, among other things. As has already been indicated, most of the faculty at Gola University affirm that experience means much more than number of years teaching. What they do to improve their knowledge and skills to become more effective and maximize student learning is more experiential than years of experience in teaching, they indicated.

Also, the strong correlation between faculty perception of their roles in classroom and variations in perceptions in learning styles is noteworthy. This may mean that how faculty perceive their roles in the classroom affects their views of learning

styles/preference and how they may teach to them. This fact was echoed over and over again by faculty members (Davis, 1993; Weimer, 1996; Lee, 2005). Equally important to note is the significantly high correlation between choice and use of multicultural course content and faculty perceptions of variations in learning styles and preferences. This finding may be interpreted as faculty who perceive learning styles/preferences will teach to it, as evidenced in the interviews with Gola University's faculty (De Vita, 2001; Le Roux, 2001).

In summary, this study has accomplished its goal: 1) It has determined that faculty teaching experience does not affect faculty perception of variations in learning styles/preferences, faculty perception of their choice and use of course content, faculty choice and use of multicultural course content, faculty view of their roles in the classroom, faculty perceptions of their choices and uses of evaluation methods in the racially and ethnically diverse classroom. 2) This study has found that faculty teaching in the racially and ethnically diverse context, who are committed to their roles, define experience in terms of commitment to what is necessary to be effective as a faculty member. Those things include, but not limited to, investment of intellectual energy, emotional energy, and time. It also requires recognizing oneself as a cultural-ethnic person, who must be willing to be personally transformed to be effective. 3) Leadership vision and commitment, resources, and diversity leadership are required to implement and successful racially and ethnically diverse student body. In a nutshell, enacting a successful diversity program is about vision and commitment. Without those two, nothing else matters.

## 5.3.1 Limitations of the Study

The first limitation of this study is its size. This study is limited to one institution, and any study that does not extend beyond one institution is likely to provide results that may be largely influenced by culture and context. That limits its generalizability. Furthermore, an exploration of language and other issues in the racially and ethnically diverse classroom and how that further impacts faculty instructional roles would have yielded more data that may have been more useful beyond what this study provides. While this study encompasses survey and interview data, a sustained qualitative exploratory study that considers both faculty and students perceptions would have provided more insights into what faculty perceive as demanded by this study, and what students think about those perceptions. In brief, checking faculty perceptions against students' perceptions would have been most helpful. But given the size of such a study and the time and resources it would require, this study could not take on such a task.

## 5.3.2 Suggestions for Further Study

This study has begun to explore an area in the study of racial and ethnic diversity in the higher education environment that needs more research. From the analyses of the research literature on racial and ethnic diversity, the case for the benefits and usefulness of racial and ethnic diversity as an asset in higher education has been adequately made. These benefits of racial and ethnic diversity include cognitive and affective development of students, civic interest development, national economic interest, security development in terms of educating officers for a robust military force, among other things. These facts have been confirmed. What scholars have not quite engaged is the research on the impact

of the challenges that accompany the enactment of robust racially and ethnically diverse student bodies in our institutions of higher learning. More studies need to be done to explore the impact of the challenges institutions face in implementing racial and ethnic diversity, particularly in the classroom, and how those challenges are overcome. Current research on these challenges is largely focused on institutions' failure to implement racial and ethnic diversity based on academic quality concerns. The Richardson-Skinner Model (1990) speaks directly to these concerns and provides recommendations to policy makers on how to proceed with addressing these concerns. To that end, other variables in the classroom that affect faculty ability to be effective and students' ability to learn must be explored (Dobbins & Brown, 2004; Rothschild, 2003).

In a more specific way, a viable continuation of this study is needed in 1) seeking to know and understand what are those experiences that are different from years of teaching that influence faculty instructional roles and in what ways, 2) what is the thinking that goes into constructing a curriculum for diversity, 3) the affects of faculty disciplines on their abilities to choose and employ race-related materials in their pedagogies, and 4) how to pilot-test a diversity-related survey instrument better.

Faculty emphasized commitment and experience with race and ethnicity. Since years of experience do not influence faculty instructional roles very much, it will be useful to know and understand those experiences that influence faculty instructional roles. Secondly, knowing the thinking that goes into constructing a curriculum for diversity will be helpful. Such knowledge will be useful to institutions that desire to implement racial and ethnic diversity among their student bodies. Thirdly, it is clear that some disciplines are more oriented toward lecture as pedagogy (e.g., mathematics and the

sciences; history, etc.). Multicultural materials may be more easily employed in some disciplines than others. Knowing how disciplines affect faculty abilities to employ race-related materials in the classroom will may be useful. Finally, despite pilot-testing the survey questionnaire three times with faculty, it was not possible to identify the non-time related experiences that would have helped to further refine the survey questionnaire in order to better capture the reality of faculty experience with the racially and ethnically diverse context. Had the study not had follow-up interviews as a supplemental method, it would not have captured the knowledge that there is more to experience when defined in terms of teaching in the racially and ethnically classroom, and the level of commitment required to enact racial and ethnic diversity in higher education.

#### 5.3.3 Recommendations

This study envisioned the need that faculty desiring to teach in the racially and ethnically diverse learning environment be given opportunities to learn more about the challenges that they are likely to face as teachers in such contexts and how they need to prepare for them. This requires, first and foremost, an initial awareness of the cost associated with the enactment of racial and ethnic diversity and the role that faculty have to play. Faculty role is critical in the enactment of racial and ethnic diversity. It is necessary that faculty learn to be deliberate in their actions and the choices they make as they take on their roles as professors in the racially and ethnically diverse classroom. Faculty interviewed in this study made it clear that their effectiveness in their instructional roles is a function of a choice they had made between "business as usual" – participating in the rhetoric of diversity and doing nothing substantive about it – and a personal commitment that entails getting out of one's comfort zone by engaging the issues of race and doing something

them as an educator. This must be reflected in personal commitment that comes with personal cost: the investment of intellectual and emotion energy, time investment, and self-analysis (e.g., recognizing that one is an ethnic being and coming to personal terms with it).

Accordingly, the high level of racial and ethnic diversity at Gola University is not a result of happenstance. Rather, it was conceived by the leadership, supported by the faculty, and had a buy-in by the entire educational community. Those who did not feel comfortable with the new direction the institution was being led by the leadership sought new opportunities to teach elsewhere. In a way, it was costly to the institution as well. As a token of its commitment to diversity, the leadership ensured that there was a strategy in place. The strategy had several pieces, two of which were 1) to earmark and allocate resources to train leaders of the diversity program (e.g., faculty), and 2) to ensure that those trained become a repository of knowledge for the institution through the conduct of educational seminars and workshops for other faculty members and the community, as well be advisors on issues of diversity to the leadership in guiding its efforts.

Another important piece in enacting racial and ethnic diversity is its integration into the curricular and co-curricular. Gola University has curriculum that reflects diversity. In the humanities curriculum, the often familiar course named Western Civilization is non-existent. In its place is World Civilizations. Faculty treatment of the humanities recognizes the great civilizations and democracies of the world, but past and present. Western civilization is just a piece of it. By so doing, faculty added, "We show that we are part of a global community and not the center of the world. It does two things:

1) it teaches our students that we really mean it when we say that we are not racist, and 2)

it teaches them about their world in which they are being prepared to make contributions after their college education." As a result of this study, the following recommendations are made:

- Institutions that desire to enact racial and ethnic diversity among their student bodies need to make full commitment to the effort. It must not only be a seasonal effort, but a long-term commitment.
- 2. Institutions that desire to enact racial and ethnic diversity among their student bodies must have a vision and a strategy, and the strategy must include leadership (faculty), funding (resources to make it work), and a willingness to pay the cost.
- 3. Institutions that desire to enact racial and ethnic diversity must effect it in both the curricular and co-curricular.
- 4. And, finally, studies done on racial and ethnic diversity must be done in contexts that are racially and ethnically diverse. This makes it possible to collect credible data that can be valuable.

Finally, an advice for researchers interested in this topic: One thing I learned during this study is that there is no want of information on racial and ethnic diversity. The researcher must be discriminating in selecting the kinds of literature that will be useful to the topic or subject being studied. Too many opinion pieces of little use are available on the topic of racial and ethnic diversity. In order to safe valuable time, researchers interested in this subject must define their topic clearly and stick with it. On the other hand, I have also learned during this study that there is no substitute for a general and broad knowledge of the subject matter. Therefore, a thorough review of the broader

context of race and ethnicity in the United States, including history, public debates surrounding the issues, among other things, would be most helpful for conceptualization.

## **APPENDIX A**

# **DISSERTATION SURVEY QUESTIONNAIRE**

## **Dissertation Survey Questionnaire**

 $Thank \ you \ for \ your \ willingness \ to \ participate \ in \ this \ study. \ \ Your \ participation \ is \ greatly \ appreciated.$ 

Please complete the following information by checking the appropriate category:

1.	Race/Ethnic Background				
	Black White Hispanic (or Latino/Latina)				
	Asian Other				
2.	<u>Gender</u>				
	Male Female				
3.	Faculty Experience (How long have you been teaching at this institution	on?)			
	0 to 5 years				
	6 to 10 years				
	11 to 15 years				
	16 years and over				
4.	Faculty expertise (general area where you teach)				
	Social Sciences (English, history, political science, etc.)				
	Hard Sciences (Mathematics, physics, chemistry, biology, comp	uter sci	ence	, etc.)	)
	Religion and/or Philosophy				
	ase indicate the extent to which you agree or disagree with the following sta ponse that most closely represents your opinion. The categories are:	tement	s by	circli	ng the
	1 – Strongly Disagree (SD) 2 – Disagree (D) 3 – Agree (A) 4 – Strongly Agree (SA)				
cla	experience with teaching in racially and ethnically diverse ssrooms has introduced me to culturally-based learning les/preferences that have prompted me to:	(SD)	<b>(D)</b>	<b>(A)</b>	(SA)
5.	view my role primarily as a <i>facilitator</i> of the learning process.	1	2	3	4
6.	view my role primarily as a <i>collaborator</i> in the learning process.	1	2	3	4
7.	view my role primarily as a <i>coach</i> in the classroom	1	2	3	4

My experience with teaching in the racially and ethnically diverse classroom has prompted me to:		(SD)	<b>(D)</b>	(A)	(SA)
8.	include course content that addresses more contemporary issues that are relevant to students of color (students of minority status).	1	2	3	4
9.	include course content that addresses diverse historical issues that are relevant to students of color.	1	2	3	4
10.	include course content that consists of readings by authors whose races and/or ethnicities are represented within the racial composition of my students.	1	2	3	4
11.	change course content to encourage discussion among students.	1	2	3	4
	experience with teaching in the racially and ethnically diverse scroom context has enabled me to see that:				
11.	students of color tend to prefer <i>cooperative</i> learning style (working together).	1	2	3	4
12.	students of color tend to prefer <i>group study</i> learning style (studying with others).	1	2	3	4
13.	students of color tend to prefer <i>small groups discussions</i> over individualized work.	1	2	3	4
14.	students of color tend to prefer <i>group projects</i> over competitive individual assignments	1	2	3	4
15.	students of color tend to prefer $personally\ relevant\ knowledge/information$ (can apply).	1	2	3	4
16.	students of color tend to prefer <i>relational learning</i> style (less competition)	1	2	3	4
Ple	ase check the answer that best applies to you				
Du	ring any semester-long course,				
17.	I lecture (primarily speak to students as a large group) as part of the learning	g expe	rienc	e.	
	0 to 25% of the class time				
	26% to 50% of the class time				
	51% to 75% of the class time				
	over 75% of the class time				

18.	I use small group discussions (several small groups discussing among themselves during the class period) as part of the learning experience.			
	0 to 25% of the class time			
	26% to 50% of the class time			
	51% to 75% of the class time			
	over 75% of the class time			
Du	ring any semester-long course,			
19.	I use student presentations (individual or groups of students organizing and presenting information) as part of the learning process.			
	0 to 25% of the class time			
	26% to 50% of the class time			
	51% to 75% of the class time			
	over 75% of the class time			
20.	I use student group projects (a specific assignment to be completed by small groups of students) as part of the learning process.			
	0 to 25% of the class time			
	26 % to 50% of the class time			
	51 % to 75% of the class time			
	over 75% of the class time			
21.	I use various field-based experiences (visiting a museum, conducting an outdoor experiment, visiting historical sites, etc.) as part of the learning experience.			
	0 to 25% of the class time			
	26% to 50% of the class time			
	51% to 75% of the class time			
	over 75% of the class time			

## Please circle the answer that bests applies to you.

1 – Rarely	( <b>R</b> )
2 – Sometimes	<b>(S)</b>
3 – Most of the time	( <b>M</b> )
4 – Always	(A)

In my student evaluations,	( <b>R</b> )	(S) (	( <b>M</b> )	<b>(A)</b>
22. I use objective tests (quantitative, yes-no, a, b, c measures)	1	2	3	4
23. I use individual student projects	1	2	3	4
24. I use individual student presentations in class.	1	2	3	4
25. I use group projects	1	2	3	4
26. I use group presentations in class.	1	2	3	4

# **APPENDIX B**

# **DISSERTATION INTERVIEW SCHEDULE**

### **Dissertation Interview Schedule**

### January, 2006

### University of Pittsburgh

Thank you for permitting me to conduct this interview with you for this study. Your help is greatly appreciated.

- 1. Tell me how long you have taught at this University.
- 2. Are you familiar with how the diversity program here began? If so, please explain.
- 3. Could you name three things that this institution has done in its implementation of the diversity program that have made it so successful?
- 4. Have faculty had to play any particular role to make the diversity program work? If so, what are they?
- 5. What are some of the challenges that implementing racial diversity poses to a university, and why?
- 6. If anything, what do you think other institutions that want to implement racial and ethnic diversity can learn from this institution?
- 7. What do you think about the claim that academics suffer when racial and ethnic diversity is implemented?
- 8. What has this institution done to maintain the quality of academics?
- 9. What special effort you have had to exert in your teaching because of diversity?
- 10. Are there other things about this program that you would like to share with me, things I have not asked about?

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