Towards the Consideration of the U.S. Community College Model to Address the Need for Higher Education Reforms in Ghana

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TOWARDS THE CONSIDERATION OF THE U.S. COMMUNITY COLLEGE MODEL TO ADDRESS THE NEED FOR HIGHER EDUCATION REFORMS IN GHANA

A Dissertation
Presented to
the Faculty of the Morgridge College of Education
University of Denver

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

by
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ABSTRACT

The higher education systems throughout the continent of Africa are undergoing unprecedented challenges and are considered in crisis. African countries, including Ghana, all have in common ties to their colonial legacy whereby they are confronted with weak policies put in place by their colonizers. Having gained their independence, Africans should now take responsibility for the task of reforming their higher education system. To date, nothing substantial has been accomplished, with serious implications for weakening and damaging the structures of the foundation of their educational systems.

This qualitative, single case study utilized a postcolonial theory-critical pedagogy framework, providing guidance for coming to grips with the mindset posed by Ghana’s colonial heritage in the postcolonial era, especially in terms of its damaging effects on Ghana’s higher education system. The study explores alternative pathways for secondary school students to transition to tertiary education—a problematic transition that currently hinders open access to all and equality in educational opportunity, resulting in a tremendous pool of discontinued students. This transitional problem is directly related to Ghana’s crisis in higher education with far reaching consequences. The alternative pathway considered in this study is an adaptation of the U.S. community college model or an integration of its applicable aspects into the current structures of the higher education system already in place. In-depth interviews were conducted with 5 Ghanaian professors
teaching at community colleges in the United States, 5 Ghanaian professors teaching at universities in Ghana, and 2 educational consultants from the Ghanaian Ministry of Education. Based on their perspectives of the current state of Ghanaian higher education, analyzed in terms of pedagogy, structure/infrastructure, and curriculum, the participants provided their perceptions of salient aspects of the U.S. community college model that would be applicable to Ghana’s situation, along with other recommendations. Access to all, including equality of educational opportunity, was considered essential, followed by adaptability, affordability, practicality, and quality of curriculum content and delivery. Canada’s successful adaptation of the U.S. model was also discussed. Findings can help guide consideration of alternative pathways to higher education in Ghana and Africa as a whole.

Themes: Postcolonial theory, critical pedagogy, Ghanaian higher education system crisis, and U.S. community college model.
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CHAPTER 1. INTRODUCTION

Africa is the only continent on earth, with the exception of a few countries, such as South Africa, where poverty continues to grow and in all probability cannot meet the United Nations *Millennium Development Goals* by 2015 (Armooh, 2007; Girdwood, 1999; Manuh, Gariba, & Budu, 2007). Regardless of the availability of their natural resources, African countries, including Ghana, still “remain at the margins of human community” (Armooh, 2007, p. 1). In part, governments in developing countries provide limited services in general, including limited education to their people (Armooh, 2007; Mbembe, 2001; Raby & Valeau, 2009). And the link between poverty and education is indisputable (Armooh, 2007; Girdwood, 1999; Young 2001).

Experts, such as Amenyah (2009), Atteh (1996), Obosu-Mensah (2006), and Sackey and Mahama (2010), have talked extensively about the educational crisis in Africa. Among the many problems, they have noted the high illiteracy rate and even higher rate of talented students who have discontinued their efforts to attain a higher education because of the lack of appropriate academic opportunities and options. In supporting the idea of encouraging the promotion of a massive education effort throughout the continent of Africa to strengthen the literacy rate, Armooh (2007) released discouraging statistics, retrieved from a speech delivered by Dr. Sam Jonah during a Rotary club dinner in Accra in 2003. In the speech, Dr. Jonah stressed the following:
Of the 40 least developed countries, 30 are in Africa. Infant mortality stands at 9% and life expectancy has dropped from 55 years a decade ago to 47….Most African countries are poorer today than they were in the 1980s, and 2/3 of African countries have stagnated or shrunk in real per capita income since gaining their independence. (Armooh, 2007, p. 1)

Based on the above statement, it is clear that there is a strong interrelationship between a country’s economic condition and the education of its populace, as is alluded to throughout this dissertation.

**Research Questions**

In this study, I examined issues associated with the crisis in Ghana’s higher education system, and subsequently the possibility of adopting the American community college model to effect change, with special focus on the transition problem. To this end, the following primary research question and sub-questions are presented and subsequently supported by the study’s theoretical framework and review of the literature:

- How can the U.S. community college model be used as an agent of change—an alternative option in addressing the present Ghanaian higher education crisis?
  
  1. What major issues of Ghana’s higher education system need reform, particularly in relation to the transition problem, and how can the issues of access and inequities in opportunity be resolved?
  
  2. What applicable aspects of the U.S. community college model can make a difference in higher education reform in Ghana, particularly in terms of the transition problem?
General Overview of Higher Education in Africa

In the domain of education, scholars, such as Chrisholm and Leyendecker (2008), Loomba, Bungi, Burton, and Esty (2001); Mbembe (2001); Obosu-Mensah (2006), and Zeleza and Olukoski (2004), emphasized the fact that Africa’s institutions of higher education are all “undergoing unprecedented change and confront multiple challenges both old and new” (Zeleza & Olukoski, 2004, p. 1). In fact, many scholars view the African higher education system as seemingly on the verge of total collapse. Given the seismic shift of the global agenda in regard to economic, political, and social structures, Mellow and Katopes (2009) made the observation that “there might never be a more important or opportune moment for a radical rethinking of how to deliver higher education worldwide” (p. 59).

Exacerbating the situation, Atteh (1996) pointed to the massive exodus of “highly educated Africans from the continent of Africa to Europe, the Middle East, Australia, and North America, in search of academic conditions, higher wages, and other opportunity” (p. 37). Thus, the quest for educational changes in sub-Saharan Africa since the 1990s reflects the need to address diverse and complex problems with the current educational pedagogies, which require serious solutions (Armooh, 2007; Atteh, 1996; Atuahene, 2008; Chrisholm & Leyendecker, 2008; Sackey & Mahama, 2010). Such scholars as Amenyah (2009), Maakora Radio UK (2004), Sackey and Mahama (2010), Sefa Dei and Opini (2007), and Zeleza and Olukoshi (2004) have acknowledged the fact that the problems related to pedagogy in Ghanaian higher education, and especially in relation to senior secondary school education, extend across Africa as a whole and far beyond.
The senior secondary school education systems throughout the continent of Africa are in disarray (Armooh, 2007; Zeleza & Olukoshi, 2004). Despite the fact that beginning with the postcolonial era, developing countries have initiated compulsory senior secondary school education, the inadequacy of senior secondary students’ educational support “not only blocks [them] from admission to ‘world-class’ universities but ignores their daily struggle to survive” (Mellow & Katopes, 2009, p. 56). This sentiment is echoed by many others, such as Mbembe (2001) and Young (2001). At the same time, “traditional universities have not altered their structure to respond to the social demand for higher education” (Raby & Valeau, 2009, p. 1). Mellow and Katopes (2009) and Obosu-Mensah (2006) have also supported this assessment, pointing to the unmet need for transitional services in the universities of developing countries.

Overall, on the continent of Africa, university admittance remains limited and is highly competitive (Effah, n.d.). This is in spite of the fact that an increasing number of people must be well educated to meet the challenges of the growing global knowledge economy, in addition to the needs and challenges of each individual African country. Moreover, closer attention must be given to “expanding the ability of low-income individuals to access and succeed in college—especially in the developing world, where they make up such a huge proportion of the population” (Mellow & Katopes, 2009, p. 55). So, the critical question must be asked, Have education reformers in the postcolonial era made any progress in Africa? Atteh (1996) claimed that dating back from 1960, African universities, including the prominent Ghanaian university, Legon, as centers of serious research and teaching in the 1960s and 1970s, are today more or less existing on their past reputation. More specifically, a World Bank report on the findings of their
research that focused on curriculum designing processes showed that despite the intentions expressed regarding past and current curricula reform in the developing world, “the outcomes have so far been well below expectations” (as cited in Leyendecker, Ottevanger, & van den Akker, 2008, p. xvii).

Another way to address the question of progress is to look at the notion of evaluation. College programs and services in Africa are faced with growing pressure to “assess student learning and program effectiveness while promoting professional development of faculty and staff to meet institutional needs in the coming decade” (Schuetz, 2002, p. 4). Some scholars, however, question such constant demands for curriculum reviews, adjustments, and reform of the Ghanaian education system, which have as yet failed to provide any meaningful results, especially in regard to the senior secondary schools. Thus, although curriculum and program effectiveness are addressed frequently, the results have been disappointing (Amenyah, 2009; Atteh, 1996; Boakye-Agyeman, 2006; Maakora Radio UK, 2004). This again suggests the need to find new ways to address the issues plaguing higher education throughout Africa.

In order to begin to understand the current state of higher education in Africa, it is also essential to take into consideration the legacies of the structures of colonialism put in place by the colonizers. Such legacies, which have penetrated the structure, curriculum, and pedagogy of postcolonial Africa, continue to hold great powers of domination over many parts of sub-Saharan Africa, resulting in a severe impact on the education of the nations of Africa, with Ghana as no exception (Atteh, 1996; Chrisholm & Leyendecker, 2008; Mellow & Katopes, 2009; Obosu-Mensah, 2006; Sackey & Mahama, 2010). In this regard, such scholars as Arnove (1980), Cain (1999), Loomba et al. (2001), and Mbembe
(2001) cautioned that the present education systems of many developing countries, with ties to their colonial history, “are the products of past colonial penetration” (Arnowe, 1980, p. 48), constituting a source of degradation to the African educational system. (More will be said later about the impact of past colonial penetration.)

Clearly, there exists a critical need for education reform in higher education in Africa. Confirming this view, Armooh (2007), Chrisholm and Leyendecker (2008), and Mellow and Katopes (2009) adamantly voiced the need for fresh innovations in education as the proper means of improving the African educational system as a whole. A more detailed look at the issue of Africa’s progress in regard to educational reform is beyond the scope of this study. However the state of higher education in postcolonial Ghana, including its reform efforts, is described and analyzed in the following section to provide the backdrop for this dissertation study.

Overview of the Crisis in Higher Education in Ghana

Building on Atteh’s (1996) claim that “the status of higher education in Africa today is chaotic” (p. 37), Effah (n.d.) concluded, “In effect, the Ghanaian system of higher education has failed the citizens of Ghana, with far-reaching consequences that are social, economic, and political in scope” (p. 2). Not just scholars, but also the citizens themselves have called for expanding the higher education system’s capability of promoting “individual access and success in college,” (Mellow & Katopes, 2009, p. 56).

In the context of Ghana’s higher education crisis, of the many significant issues related to individual access and success in college, this study focuses primarily on the inability of many senior secondary students to transition to higher education (hereafter referred to as the transition problem). Moreover, within this problem are interwoven the issues of
access for all and inequities in opportunity, along with the need for the type of quality education that will lead to success not just in college, but in life—an education that is relevant and sensitive to the citizens and society’s needs and values.

Providing an overview of the current crisis in higher education in Ghana, this section examines salient factors that either directly or indirectly affect Ghana’s higher education system. Elaborating on these factors, current statistics are presented in order to emphasize the access problem in terms of inequities in educational opportunity and the demand-supply gap—the serious imbalance between the rapid expansion of students who are seeking a tertiary education and the availability of funding (public and private, inside and outside of Ghana) affecting the supply side of the equation. Next, a brief description is provided of the role polytechnic institutions play in Ghanaian tertiary education, and specifically, what if any contribution they have made to the problem of students’ discontinuing efforts to transition to a university. To conclude this overview of the current state of Ghanaian higher education, a brief examination is undertaken of key factors that hindered the overall success of one of Ghana’s recent (1993-1998), well-recognized reform efforts, the Tertiary Education Project (TEP). These hindrances continue to impact the state of higher education in Ghana (Armooh, 2007; Atteh, 1996; Girdwood, 1999).

Salient Factors

Four salient factors have been singled out for discussion here, based on their relevancy to the transition problem that plagues higher education in Ghana. These include (a) the access problem and the interrelated issue of inequities in educational opportunity, (b) decreasing quality of education as a result of structural constraints and poor
infrastructure, (c) the demand-supply gap and the enrollment problem, and (d) the impact of postcolonial penetration.

**The access problem and inequities in educational opportunity.** Open access to higher education is lacking in Ghana, reflecting many inequities related to educational opportunity. In this context, Dijkstra and Peschar (2003) talked primarily about the continuing relevancy in any discussion of reform of the uneven distribution of educational opportunities. Gender imbalance and socioeconomic inequity—marginalization of the poor students—are glaring examples of such inequities in educational opportunities (Darvas, 2010; Girdwood, 1999).

In regard to inequities in the socioeconomic domain, Sackey and Mahama (2010) posed, “To what extent [does] social background influence educational achievement in Ghana society?” (p. 59). Akyeampong (2010) strongly advocated for broader participation in higher education from all groups, not just the well-off segments of society. He pointed to the fact that “much of the increased participation in tertiary education is coming from relatively few urban secondary schools” (p. 10). Similarly, a study of Ghanaian higher education for the period from 2002/3 to 2007/8 revealed that, for the most part, “while the regions that are historically privileged in the distribution of students extended their domination, the disadvantaged ones grew worse off” (Darvas, 2010, p. 156). Moreover, a survey conducted in 2002 by the National Center for Education Statistics (NCES) revealed the following:

Enrollment in higher education is skewed in favor of students with white-collar parentage over those with blue-collar parents. HE [higher education] in Ghana is disproportionately “consumed” by the richest 20% of the population. Male students from the highest income quintile are more than seven times more likely to
enter and successfully complete HE than those from the poorest quintile. (Darvas, 2010, p. 157)

Regarding gender-based equity, males are almost twice as likely to be enrolled in higher education as females, and males from wealthy families are seven times as likely to enroll and succeed in higher education (Darvas, 2010). Thus, women continue to be underrepresented, although there has been some slight improvement. As of 2007/8, gender parity rose to 0.49 (2 males to every female) from the prior year’s figure of 0.33; and according to the World Bank’s World Development Indicators, the gender parity ratio has more recently risen to 0.54 (Darvas, 2010). Thus, it is increasingly clear that as Ghana considers how to better promote access to education while balancing “adequately the needs of Ghanaian society” (Sefa Dei & Opini, 2007, p. 469), it must face the challenge of “expanding the base from which tertiary education draws its students” (Akyeampong, 2010, p. 11). How this can be accomplished is one of the overarching concerns of this research study.

**Decreasing quality of education: Structural constraints and poor infrastructure.** A thorough examination of the structural constraints and poor infrastructure of the Ghanaian higher education system, resulting in decreasing quality of education, is beyond the scope of this study. Nevertheless, these factors play a major role in the successful implementation of any attempt at educational reform. Therefore they are included here as a salient factor, based on their direct and indirect relevancy to not only the decreasing quality of education but also the transition problem—a major focus of this study.
External structural constraints and the interrelated problem of poor infrastructure of Ghana’s higher education system account, in large part, for Ghana’s slow progress in implementing much-needed reform. This is implied by the following analysis:

Over the 1970s and the early 1980s, a significant deterioration in conditions took place within the tertiary education sector, firstly in terms of financial provision and physical infrastructure, and secondly in the relationship between the institutions and successive civilian and military governments. (Sawyer as cited in Girdwood, 1999, p. 4)

In regard to financial constraints, not only was there inadequate funding for the ongoing operations of higher education, but even more so in regard to reform efforts (Girdwood, 1999).

This is not to say that Ghana has not designed reform projects that are highly acclaimed, both at home and internationally (Atteh, 1996; Girdwood, 1999; Sackey & Mahama, 2010). In fact, one such project was the 5-year Tertiary Education Project (TEP) in the 1990s. However, in efforts to implement this project, structural constraints were not recognized—or at least, not addressed. As a consequence, little reform of a sustainable nature in Ghanaian higher education via the TEP was realized. Part of the problem with TEP reform efforts was also the political environment at that time, stemming mainly from the transition in Ghana from a military to a civil, constitutional government, which resulted in changed priorities. In addition, the country’s limited economic resources dictated where and how the country’s financial resources were to be spent. As Girdwood (1999) explained,

It is apparent that there has been considerable disjunction between (i) longstanding policy agreement, and the acceptance of political responsibility for announcing new and unpopular measures; and (ii) the implied costs underlying policy decisions, and fiscal reality. (p. 3)
A direct consequence of the inadequacy of available financing for badly needed reforms—as well as for the maintenance of existing operations of tertiary institutions—was that Ghana’s higher education system deteriorated even more during this 5-year period, particularly in terms of infrastructure, and in turn, quality of education (Girdwood, 1999; Manuh et al., 2007). Thus, it is not surprising that many scholars have directly associated the educational crisis spreading throughout Africa with structural constraints and poor infrastructure, including the lack of adequate teaching and learning facilities (Chrisholm & Leyendecker, 2008; Mellow & Katopes, 2009; Sackey & Mahama, 2010).

This situation is especially true in Ghana, where there is much evidence that equates with poor infrastructure. In addition to inadequate facilities, there are “low numbers of well-motivated and committed teachers, absence of proper guidance and counseling services, and poor management and supervision” (Sackey & Mahama, 2010, p. 2), an assessment strongly supported by Armooh (2007). Some of the other key factors contributing to Ghana’s overall poor infrastructure—primarily as a result of too little financial resource allocation—include but are not limited to falling standards and decreasing quality of education; the precarious relationship between the Government and the students, who were known for the power of their protests; and the lack of coordination among the various Government Ministries, as evidenced by the contention between the Ministry of Finance and the Ministry of Education (Atteh, 1996; Girdwood, 1999). All of these indications of poor infrastructure continue to directly and/or indirectly affect Ghana’s higher education system as a whole and, in turn, the ability of many students to make the transition from senior secondary school to higher education.
The demand-supply gap and the enrollment problem. A look at the supply side of the demand-supply gap reveals a substantial growth in tertiary institutions since the time of Ghana’s independence, when there were only two public universities. In fact, it can be said that tertiary education has expanded in the postcolonial era at an exponential rate (Darvas, 2010; Manuh et al., 2007). At present, Ghana has 6 public universities (Darvas, 2010), “over 20 private (local- and foreign-owned) university colleges, 10 public polytechnics and several other professional/specialized (both public and private) tertiary institutions” (Akyeampong, 2010, p. 10). Correspondingly, university enrollments rose from 14,272 to 27,812, an increase of 95% (Girdwood, 1999). From 1997/8 to 2006/7, student enrollment in public universities (excluding colleges of education) and polytechnics increased by over 120% (NCTE Statistical Digest as referred to in Akyeampong, 2010).

Moreover, with the upgrading of the polytechnic as a trade school to the status of an institute of higher learning, the tertiary sector of higher education saw a doubling of enrollment within a year, in sequence from 14,500 in 1993 to 30,000 in 1994. Within the decade of 1997/1998 to 2007/08, the total enrollment in public institutions of higher learning (excluding the colleges of education) had more than tripled, from 40,000 to 132,604 (Chambas; National Council on Tertiary Education as referred to in Darvas, 2010). In other statistics, a glance at 3-year trends in tertiary enrollment between 1990 and 2005 illustrates further that access to tertiary education has experienced tremendous expansion: “9,997 students in 1990, 15,500 in 1993, 24,500 in 1996, 46, 500 in 1999, 86,570 in 2002, and 121, 390 in 2005” (Adu-Orivel as cited in Darvas, 2010, p. 152).
Nevertheless, this tremendous growth in tertiary institutions has not been able to keep pace with Ghana’s population growth, along with the increased universal demand for an educated populace. The resultant high demand for tertiary education began to far outweigh the supply, creating an ever-increasing gap between supply and demand. This imbalance is not without repercussions, such as decreased quality of education due to structural constraints and poor infrastructure, as discussed above. Such imbalance has also resulted in corruption. In the words of Amenyah (2009),

The increasing demand for higher education has created corruption in higher education admissions, examination malpractices, such as falsification of entry requirements, [and] bribery of admissions officials for the limited spaces that are available. (p. 1)

The tremendous demand-supply gap in the provision of educational services in higher education, which began in the colonial era, is further complicated by the competitive nature of seeking education beyond secondary school education in Ghana (Childs & Williams, 1997; Young, 2001). According to Boissiere (as cited in Darvas, 2010),

Such rapid expansion in enrollment has placed substantial pressures on the supply side, in particular in terms of new faculty members and adequate infrastructure. Adding to the stresses per the enrollment influx and resource demands, governance structures in tertiary institutions have not adapted and basically have remained unchanged over the past years. (p. 152)

Hence, the interrelated factors of population growth, lack of adequate infrastructure and financial resources to manage the increasing demand, and the resultant fierce competition and corruption, together with the problematic transition from senior secondary school to a university education—all have played into the current crisis in higher education in Ghana. Such crisis clearly calls for fundamental reform in terms of
structure, addressing the need for expansion of tertiary education facilities as well as the reform of its accompanying infrastructure. Yet, inevitably, the structural constraint of limited available funding for such expansion and reform remains a primary issue (Amenyah, 2009; Girdwood, 1999; Manuh et al., 2007). Alternative solutions are also needed.

Thus, despite the fact that there was tremendous growth in enrollment in tertiary institutions, particularly between 1990 and 2005, this presents a deceiving picture of the problems facing higher education in Ghana. In addition to the nagging problem of funding to support the needed expansion of enrollment, there remains, as a result of competitiveness and various other inequities in opportunity, the problem of access to higher education, as manifested by the transition problem—the inability of a large proportion of the senior secondary school graduates to pursue a higher education due to their inability to pass the entrance examination to a public university. The following demographic trend illustrates the low proportion of students who get into the Ghanaian higher education system:

Only about 30% of junior secondary school graduates are able to gain admission to senior secondary schools and only about 35% of senior secondary school graduates are able to gain admission to universities and polytechnics, plus 10 to 20% to diploma-level post secondary education. (Ghana Facts, 2009, p. 3)

Compounding this situation, universities in Ghana are very selective. For example, “For the academic year of 2008, University of Ghana, at Legon, registered 19,340 degree candidates, accepted 9,373 candidates, out of whom 6,849 were admitted, with the difference having been absorbed obviously by foreign universities” (Effah, n.d., p. 2). These various statistics illustrate the extent of the transition problem, a situation
where a tremendous pool of senior secondary school students have become “school leavers,” because they are not qualified, or cannot pass the entry examination. From a more practical standpoint, part of the reform needed to help solve Ghana’s educational crisis would be to find a way to address the enrollment issue by effectively increasing the number of people who have postsecondary education. Finding an effective and culturally appropriate solution, which constitutes the central focus of this study, would, in turn, produce other long-term benefits for Ghana related to an educated populace.

In short, the growing demand-supply gap, together with the need for expansion and a revitalized infrastructure, as well as the gender imbalance and glaring socioeconomic inequity, call for innovative solutions—reforms that factor in the impact of postcolonial penetration. And as discussed earlier, any such efforts must include the strong, consistent support of the Ghanaian government—its policy makers (Atteh, 1996; Girdwood, 1999).

**The impact of postcolonial penetration.** Clearly, there is urgent need for reform for Ghanaian education system as a whole (Chrisholm & Leyendecker, 2008; Mellow & Katopes, 2009; Obusu-Mensah, 2006). However, to rewrite Ghanaian educational history, one must also “include the history and impact of colonial and postcolonial endeavor” (Chrisholm & Leyendecker, 2008, p. 1; Loomba et al. 2005). Accordingly, in predicting Ghana’s educational future, one must also explore both external and internal pedagogies that have influenced the trajectory of Ghanaian educational changes (Atteh, 1996; Atuahene, 2008; Effah, n.d.).

Furthermore, there is ideological significance in the constraints posed by long-standing beliefs about the issues of how, when, and to whom higher education should be
delivered that must be broken down (Mellow & Katopes, 2009; Obosu-Mensah, 2006; Raby & Valeau, 2009). In light of past colonial penetration, such beliefs are intermingled with the fundamental problem of access to education and the interrelated issue of inequities in educational opportunity. Overall, breaking free of the old paradigm does not necessarily mean lowering standards or doing away with both internal and external examinations. Rather, it has to do with establishing pathways that are particular to the African situation and needs. In this context, it also has to do with “formulating multiple means for adult postsecondary education to flourish” (Mellow & Katopes, 2009, p. 58).

The Polytechnics

Ghanaian educational pedagogy, which stems from its colonial history, has influenced current leaders’ attitudes, suggesting perhaps a postcolonial reaction to the colonial mindset of earlier years (Armooh, 2007; Boakye-Agyeman, 2006). Thus, in addition to transforming the educational cycles into shorter terms of school completion, current higher education reforms in Ghana have been aimed at ensuring that education is geared towards providing polytechnic skills for students who cannot enter the university system (Sackey & Mahama, 2010; Sefa Dei & Opini, 2007). For, in postcolonial Ghana, senior secondary school education had been established purposefully in response to criticism that, in the past, “this level of education has been overly academic and removed from the country’s development and manpower trends” (Maakora Radio UK, 2004, p. 2).

A result of this reaction is the current promotion of a polytechnic-style education. Accordingly, in the early 1990s, polytechnic education was emphasized to meet the country’s mid-level manpower needs (Boakyi-Agyeman, 2006; Girdwood, 1999). Unfortunately, funding was not forthcoming from the Government to support such an
emphasis, and as a result, the polytechnics were severely underfunded. For example, although the number of polytechnics increased from six to eight institutions during the TEP reform period (1993-1998), expenditures for full-time polytechnic students fell from an already too low US$180 in 1994 to a meager US$74 in 1997, entirely inadequate for a credible tertiary education (Girdwood, 1999; Manuh et al., 2007). Implied in these statistics is the conclusion that even the quality of a polytechnic education has declined.

Historically, the polytechnics were established in Ghana as trade schools under former British direction. Compared with a university education, polytechnic education is considered “career-oriented and more practical in content….Polytechnics therefore play a crucial role in the developmental process of the nation by offering varied programmes which provide the country with the middle-level manpower requirements” (Boakye-Agyeman, 2006, p. 9).

Nevertheless, these trade-type, postsecondary institutions have not initiated any changes that address problems faced by Ghanaian higher education, such as those associated with the demand-supply gap related to a university education (Armooh, 2007; Boakye-Agyeman, 2006; Obosu-Mensah, 2006). A good example is the polytechnics’ failure to put in place any educational mechanism or reform, such as a preparatory or remedial curriculum, to assist students from senior secondary school who wish to enter a university but are unprepared.

In the end, Ghana’s overemphasis on a polytechnic-style education is seen as problematic, because such attitudes, according to Armooh (2007), have “rendered education irrelevant in the quest to achieving accelerated growth and development” (p.
2). This consequently has destroyed the progress of the direction of the education of Ghana, along with other African countries’ education in general.


Ghana’s recent (1993-1998) substantial efforts to reform its system of higher education should be recognized if not praised. However, the overall results were highly disappointing (Girdwood, 1999; Manuh et al., 2007). To explain, in conjunction with the World Bank, the previous Government of Ghana undertook the ambitious Tertiary Education Project (TEP), a 5-year program, which was highly acclaimed internationally; in retrospect, it was extremely broad, complex, and somewhat idealistic. The purpose of this project was to assist the Ghanaian Government with the restructuring and enhancement of the quality of its higher education system, providing a plan to address tertiary education’s lack of adequate funding and general decline (Akyeampong, 2010; Atuahene, 2008; Girdwood, 1999). The expectation was that the project’s overall impact would be that of “improvement of quality in the processes of teaching and learning” (*Staff Appraisal Report* as cited in Girdwood, 1999, p. ix). In the Executive Summary of the study, *Tertiary Education in Ghana – An Assessment: 1988-1998*, the study’s author, Girdwood (1999), reported the following overall progress of this project:

> At the conclusion of the TEP, many of the key policy agreements had been reversed, apparently forgotten, or only partially implemented. The crucial balance between enrollment growth and the level of financing available to ensure improved academic quality—the core objectives of the reform programme—had not been achieved….It seems very likely that the gains made over previous years will be jeopardized if this imbalance…continues. (p. viii)

Although it is beyond the scope of this study to elaborate on the reasons for the poor outcomes regarding implementation of TEP’s objectives, such reasons are relevant
to any future reform efforts. Thus, a few observations regarding structure are presented here, based on Girdwood’s (1999) report to the World Bank on the TEP. As discussed earlier, the imbalance between financing and enrollment expansion was clearly a major hindrance. For instance, in that time period of 5 years, government expenditure on higher education was seen to decline rather than rise, decreasing to one-fifth (from 15 to 12%) of the budget. At the same time, student enrollment skyrocketed, increasing 80% during the 5-year course of the project. Moreover, the average expenditure for a full-time student dropped from $2,500 per year in 1990 to $900 in 1997, considered not conducive to a quality university education. In this same environment of funding cuts, TEP objectives regarding cost-sharing and cost recovery were not implemented to any significant extent. Over all, regarding the major factor of financial support for project implementation, “unrealistic assumptions were made about the level of finance likely to be available” (Girdwood, 1999, p. x), both from external and internal sources.

Another factor impeding progress toward reform was associated with the unrealistic scale and complexity of the project’s policy framework, including its lack of a well-defined timeline (Akyeampong, 2010; Girdwood, 1999). Moreover, the lack of well-defined concepts that were central to the project’s objectives, such as “quality,” “equity,” and “relevance,” posed a serious problem in terms of implementation and subsequent evaluation. For example, not knowing specifically what was meant by “academic quality” doomed the project to failure in terms of how to accomplish and measure such quality. In addition, a careful definition of needs and priorities was lacking. According to Girdwood (1999), along with Atteh (1996) and Atuahene (2008), it was apparently assumed by the
policy makers and project planners that the more money that could be directly put into academic reform, the better the outcome regarding improved teaching and learning.

In the political realm, the project suffered from the transition that took place in the Government of Ghana during the period beginning with initial planning through the end of the 5-year project. During this period, there was a disconnect between the initial commitment and political will of the earlier military government and that of the newly elected constitutional government that took over the implementation of the project, including the project’s policies and goals. To explain, whereas the former government participated in the planning phase of the project, the newly elected government was expected to implement it. This new government was now subjected to electoral pressures. The result was a lack of commitment to some of the more unpopular projects, reflecting on policy agreements (e.g., cost-effectiveness reforms) that had been agreed upon by the previous military government in conjunction with the World Bank (Amenyaw, 2009; Atteh, 1996).

Finally there were important structural constraints that impeded implementation of the TEP, some of which were indicated earlier. Girdwood (1999) gave the example that the Government failed to recognize preconditions that were strongly related to successful reform, “particularly the extent to which change was dependent upon the cooperation of other Government departments and ministries (especially the Ministry of Finance)” (p. xiii).

**Statement of the Problem**

In its desire to make higher education more accessible to the people, the Ghanaian government made commendable strides throughout the 20th century among the
developing countries, “while the same cannot be said about [other] developing countries in Africa” (Mellow & Katopes, 2009, p. 54; Sackey & Mahama, 2010). However, little was accomplished regarding Ghanaian senior secondary school transitioning capabilities to higher education. The transition problem is directly related to Ghana’s current crisis in higher education and has far-reaching consequences. For example, Armooh (2007) and Amenyah (2009) pointed to the enormous amount of talent that is wasted as a result of this phenomenon.

As the situation now stands, many senior secondary school students fail the university entrance examination and must continuously retake the examination until passed, with no recourse to further academic preparation or remedial support (Armooh, 2007; Atteh, 1996). This situation leads students to become frustrated. Consequently, many refrain from further attempts at taking the examination, thereby discontinuing efforts to make the transition from senior secondary school to higher education (Armooh, 2007).

During a recent Parliamentarian session in Ghana, the new minority leader, Amenyaw-Akumfi, spoke to this issue, contending that the current public university system in Ghana severely limits senior high school students’ access to higher education in terms of its inability to serve the tremendous number of students who seek its educational services (Sackey & Mahama, 2010). In his explanation, Amenyaw-Akumfi stressed that Ghana’s education system provides little opportunity for students who need a second chance at accessing government universities to continue their education unless parents have the resources to pay for a private education. This shifts the burden to the parents, most of whom are unable to afford private education costs (Armooh, 2007;
Sackey & Mahama, 2010). Examining a solution to this specific problem constitutes the major focus of this study.

Furthermore, there was recent heated debate in the Ghanaian Parliament between the majority leader and the minority leader regarding whether to shorten or lengthen the years of educating the Ghanaian senior secondary school students who desire to transition to universities, as mentioned earlier (Sackey & Mahama, 2010). However, this is hardly the central issue to be debated. Rather, deserving of attention are the impediments facing students transitioning from senior secondary school to higher education in Ghana. According to Atuahene (2008), these include “a myriad of challenges such as accessibility, affordability, faculty recruitment and retention, and a deplorable state of infrastructure due to general poverty and macroeconomic instabilities of the country” (p. 1). The decreased quality of higher education is also an issue. This was acknowledged by the Ghanaian Minister of Education, who emphasized the “low quality education at the senior secondary school level” (Sackey & Mahama, 2010, p. 2).

Not surprisingly, Ghana is not alone in its higher education crisis. For example, a similar situation exists in Botswana regarding the relationship between higher, secondary, and primary education. According to Morapedi (2004), “In Botswana, the turn of the century has seen a phenomenal increase in the number of secondary school leavers” (p. 522) who do not even attempt to go on to universities.

Reflecting in general on the state of education in Africa, Armooh (2007) concluded that Africans need “educations that will enlighten people not blur the people vision” (p. 2). The question of interest in this study was, How can this be accomplished in Ghana? Based on the above discussion, in exploring reform efforts, close attention was
directed to the transition issue, and in turn, the access issue, the enrollment problem, and the declining quality of education (Armooh, 2007; Childs & Williams, 1997; Chrisman, 2003; Young, 2001). Subsumed under these issues are inequities in opportunity as well as structural constraints and poor infrastructures (Achebe, 1958; Loomba et al., 2005; Mbembe, 2001). Interwoven throughout these issues is the impact of past colonial penetration in postcolonial Ghana, which was addressed in this study with a conceptual framework that included both postcolonial theory and critical pedagogy theory.

**Postcolonial Theory-Critical Pedagogy Framework**

Both postcolonial theory and the critical pedagogy theoretical perspectives, as manifested in Freire’s practice theory of social reconstruction, rest on the vision of transformation (Farr, 2009; Freire, 2006; DuBois as stated in Rabaka, 2009; Roderick, 1986). This makes them highly applicable as theories for change in higher education in Ghana. In effect, postcolonial theory “introduces racial and cultural dimensions into the analysis” (Childs & Williams, 1997, p. 22), and it is supported by critical pedagogy, particularly as influenced by Freire (2006) in regard to teaching and learning practices. As such, this theoretical framework provides the guidance for coming to grips with the mindset posed by Ghana’s colonial heritage in the postcolonial era, especially in terms of its damaging effects on Ghana’s higher education system (Armooh, 2007; Atteh, 1996; Atuahene, 2008; Sackey & Mahama, 2010).

**Postcolonial Theory**

*Postcolonial* can be understood superficially as referring to “a period coming after the end of colonialism” (Childs & Williams, 1997, p. 1; Irele, 2007). However, aside from its historical or period-related context, “postcolonial” implies the indirect influence
and/or control—politically, economically, and culturally—that the colonizing powers continue to have over the colonized countries after their independence (Childs & Williams, 1997; Loomba et al. 2005; Mbembe, 2001; Young, 2001).

Scholars, such as Carey and Festa (2009), Cesaire (2000), Mbembe (2001), Chrisman (2003), Venn (2006), and Young (2001), emphasized the scope of the danger of the postcolonial era wherein the old forms that were put in place during the colonial era are still at work. Such forms have been carried forward in transforming the world of the colonized countries, replacing earlier cultural values with the Western notion of competition, which is embedded in, for example, the curriculum designed for educating students in colonial territories (Childs & Williams, 1997; Chrisman, 2003; Hadjor, 1998; Venn, 2006). The postcolonial period can also be characterized in terms of postmodern intellectual discourse that consists of reactions and an analysis of the cultural legacy of colonialism, with the resultant impediments experienced by the countries that have been colonized (Butler, 2009; Chrisman, 2003; Loomba et al., 2005; Proctor & Morey, 2002), and Ghana is no exception.

Postcolonial theory, which encompasses varied individual theories and approaches, addresses issues of identity crisis, ethnicity, race, and gender, as well as the challenges of developing postcolonial national identities and the relationship between power and knowledge (Carey & Festa, 2009; Hadjor, 1998; Venn, 2006; Young, 2001). Mbembe (2001) characterized the postcolonial era as “a period of embedding, a space of proliferation that is not solely disorder, chance and madness but emerges from a sort of violent gust, with its beauty and ugliness” (p. 242). Therefore, in utilizing postcolonial theory, this dissertation study adopts a critical and anti-colonial discourse framework to
interpret higher education in Ghana’s postcolonial era. As such, the postcolonial framework allowed for a questioning of the confirmations of power embedded in the ideas of culture and the histories of knowledge production and to what extent colonized countries will go to dilute the system for their interest (Mbembe, 2001; Sefa Dei & Opini, 2007; Young, 2001).

The subtle and ingrained nature as well as the extent of the influence of colonialism in postcolonial times is conveyed by Slemon (as cited in Childs & Williams, 1997), as he discussed the usefulness of post colonialism:

The concept [of post colonialism] proves most useful not when it is used synonymously with the post independence historical period in once colonized nations, but rather when it locates a specifically anti or post colonial discursive purchase culture, one which begins in the moment that colonial power inscribes itself onto the body and space of its Others and which continues as an often occulted tradition into the modern theatre of neocolonialist international relations. (p. 3)

In short, it can be said that postcolonial theory represents anti-colonial challenges to the pervasive Western influence that began with European colonization (Chrisman, 2003; Mbembe, 2001; Venn, 2006; Williams & Chrisman, 1994; Young, 2001).

A specific example of the troubling postcolonial mindset, cited by Mellow and Katopos (2009), is that as an overall solution to their educational crisis, leaders in such countries as Ghana and Rwanda hold high hopes for developing universities that can compete globally in science, technology, and engineering, in collaboration with the top American community colleges, creating a type of global university network in terms of capacity building. However, Mellow and Katopos contended that the significance of pursuing, as the primarily solution, the development of high-tech, 4-year universities to accomplish such a goal would not serve the interests of the developing world. In
explanation, these scholars argued that “a singular focus on the rarified world of high-end science and cutting-edge technology may sabotage the very social, political, and intellectual progress . . . [that most developing countries] seek and need” (p. 56).

From a postcolonial standpoint, the notion of solving the educational crisis in countries, such as Ghana, solely by developing universities that can compete globally appears to represent a disconnect with reality. For the most part, the general population of the developing countries has received an inadequate secondary education, which is an impediment to their admission process to “world-class” universities and, at the same time, disregards their daily challenges to survive (Mellow & Katopes, 2009). In this respect, the traditional 4-year model of the elite 4-year institution of higher learning favors the elites, and thus, rather than assisting a developing country in terms of its economic and political disorder, “will retard the development of a new, vibrant, and economically sustainable society” (Mellow & Katopes, 2009, p. 56).

Critical Pedagogy

Guess (1981), Holub (1991), and Rasmussen (1996) contended that critical theory, from which critical pedagogy is derived, is significant as a metaphor for a certain kind of theoretical orientation of social reforms, which owes its origins to the era of Kant, Hegel, and Karl Marx. This theory has continued to play a crucial role in reforming and transforming social systems (DuBois as stated in Rabaka, 2009). According to Dr. Assefa (personal communication, July 2011), critical pedagogy can be considered particularly relevant in overcoming postcolonial influences when exploring a solution to Ghana’s crisis in higher education in relation to structure, curriculum, and pedagogy.
Rabaka (2009) stressed the need for critical theory in the African context, relying on an essay of Dr. W. E. B. DuBois in demonstrating the importance of the argument that “many problems of the past remain problems in the present because many classical critical theorists quarantined their discourse along racial and gender lines” (p. x). In this discourse, Rabaka legitimized Dr. W. E. B. DuBois’s obsession with broadening the basis of contemporary critical theory, thereby demonstrating a new version of advocacy. In doing so, DuBois strengthened the framework for designing the thought and analysis of an African critical theory model.

Therefore, critical theory on one hand can be considered a reflection of theory “which gives agent to a kind of knowledge inherently productive of enlightenment and emancipation” (Guess, 1981, p. 2). From this position, critical theory looks qualitatively at how to transform social reality without recourse to the fundamental concepts of traditional philosophy as they continue to exist in postcolonial Africa in general and to a sharpening of the present condition of the specific track history of that particular country (Farr, 2009; Roderick, 1986).

*Critical pedagogy* on the other hand is not only an educational theory but also provides a framework for teaching and learning practices. Greatly influenced by Freire (2006), a scholar renowned for his attack on the banking concept of education, critical pedagogy is particularly concerned with changing or transforming the traditional student-teacher relationship (Freire, 2006). Thus, complementing the postcolonial theoretical framework used in this study, the critical pedagogy perspective helped with an understanding of why the quality of education in postcolonial Africa is behind other
continents and how to ideologically emancipate the Ghanaian senior secondary school students and effect reform, based on an understanding of Freire’s banking concept.

**The banking concept.** According to Freire (2006), in the banking concept, the student is conceived as an empty receptacle to be filled solely by the teacher (the one who knows). Freire explained,

> Education...becomes an act of depositing, in which the students are the depositories and the teacher is the depositor. Instead of communicating, the teacher issues communiques and makes deposits, which the students patiently receive, memorize, and repeat. This is the “banking” concept of education, in which the scope of action allowed to the students extends only as far as receiving, filing, and storing the deposits. They do, it is true, have the opportunity to become collectors or cataloguers of the things they store. But in the last analysis, it is the people themselves who are filed away through the lack of creativity, transformation, and knowledge in this (at best) misguided system. (Ch. 2, p. 1)

Manifesting this concept, a few of the key attitudes, which also mirror any oppressive society, include the following:

1. The teacher teaches and the students are taught;
2. The teacher knows everything and the students know nothing;
3. The teacher talks and the students listen—meekly;
4. The teacher chooses and enforces his choice and the students comply;
5. The teacher chooses the program content and the students (who were not consulted) adapt to it;
6. The teacher confuses the authority of knowledge with his own professional authority, which he sets in opposition to the freedom of the students;
7. The teacher is the subject of the learning process, while the pupils are mere objects. (Freire, 2006, p. 73)

Moreover, “conscientization,” according to Freire (1970), is a process by which persons are not just considered as recipients but also as active learners. As such, they strive to achieve a deeper awareness of both social and cultural reality that shapes their lives and the ability to transform the reality of consciences.
Therefore, Freire’s concept, as argued by McNeil (1990), is a clear indication of “enlightening people about the obstacles that prevent them from having a clear perception of reality” (p. 37). It represents an attack on traditional pedagogy. Furthermore, “[the] prevalence of teaching with traditional and outmoded styles of ‘chalk and talk’ teaching strategies largely needs more modification” (p. 197). Freire’s banking concept is applicable in enhancing the curriculum of teaching and learning to create a curriculum that is no longer solely content driven (Chisholm & Leyendecker, 2008) but focuses more on the students rather than its being teacher-centered (McNeil, 1990).

**Changing the teacher-learner relationship.** The concept of learner-centered education as was derived from Piaget and John Dewey becomes more essential in looking at ways of educating Ghanaian students. However, the main focus of the contemporary understanding of learner-centered education, as was based mainly on Vygotskian cognitive psychology, needs to be explored (Chisholm & Leyendecker, 2008). This perspective differs from pedagogies based on behaviorist psychologies, because it acknowledges the way the mind works (Chisholm & Leyendecker, 2008).

As an ideological starting point for establishing a teaching-learning environment, hooks (1994) specified in supporting the mission of education that “respect and care for the souls of our students are essential in providing conditions for learning and where learning can most deeply and intimately begin” (p. 245). Attacking traditional pedagogy from a practical perspective also suggests the application of Freire’s (2006) critique of the banking concept of education, which can provide “a careful analysis of the teacher-student relationship at any level, both inside and outside the school” (p. 71). Freire (2006) provided more than enough material that is applicable in an analysis of the teacher-
student relationship to be helpful in exploring why so many students in Ghana’s senior secondary schools are not passing the entry examination that gives them access to an institution of higher learning.

For this study, the works of postcolonial theorists, such as Carey and Festa (2009), Childs and Williams (1997), Mbembe, (2001), and others, were used to contribute to an interpretation of the findings in providing the rationale for why a change is needed in the Ghanaian education system. In addition, critical pedagogy scholars, such as Freire (2006), Aronowitz (2003), and others, helped provide the ideological background in this study for a basic preliminary understanding of an appropriate pedagogy as it relates to reform of the Ghanaian higher education system and, in particular, the transition problem.
CHAPTER 2. REVIEW OF THE LITERATURE

Analysis of How the Current Crisis in Ghanaian Higher Education Developed

To gain a general understanding of the current state of higher education in Ghana, this section begins with an analysis of the present-day system from a postcolonial theory-critical pedagogy vantage point. In particular, postcolonial higher education, as influenced by its colonial legacy, is presented as a product of four key issues. To conclude this section, a brief analysis of the role policy makers have played in the current state of affairs in higher education is provided. Such an understanding is useful in order to make the necessary changes that, among other benefits, will help address the issues of access, enrollment expansion, and quality of education, all of which contribute to the problematic transition from senior secondary school to higher education, which is central to the current higher education crisis in Ghana.

As seen from the ordinary or lay person’s perspective, most African countries, including Ghana, “inherited colonial watered-down educational structures that have significant pitfalls” (Sefa Dei & Opini, 2007, p. 469; Loomba et al., 2005; Young, 2001), such as limited opportunity in terms of curriculum design, as compared to the developed world. Nevertheless, countries such as Ghana have failed to alter exclusive colonial paradigms and inequities (Sifuna as referred to in Sefa Dei & Opini, 2007). In light of this, the study’s application of the postcolonial theory-critical pedagogy lens to an understanding of Ghana’s current state of higher education, as indicated above, is seen as
an essential strategy in recognizing and replacing or transforming, where necessary, the old ideas that are preventing significant educational growth. As explained by Sefa Dei and Opini (2007) in their article, “The Challenge of Post-Colonial Education in Ghana,” the main insight in the anti-colonial and postcolonial framework is the recognition of locally produced knowledge emanating from cultural history, daily experiences, and social interactions. In contrast, the colonizing practice (which continues today) sought to create hierarchical relationships while espousing a universality and superiority of certain knowledge systems and experiences by weakening the curriculum that had been put in place (Mbembe, 2001; Opini, 2007; Sefa Dei; Young, 2001).

Four Issues

A critique of contemporary postcolonial higher education in the context of the legacy of colonial higher education can be viewed as crystallizing around four main issues. These issues include (a) replacement of African counter-part elite administrators and managers, (b) limited curriculum, (c) degree granting, and (d) the “ivory tower” enigma (Ade Ajayi, Goma, & Ampah Johnson, 1996). The following brief overview of these four issues is based primarily on the work of Ade Ajayi et al. (1996), but also contains other scholars’ contributions, along with some general ways to address these issues.

Replacement of African counterpart-elite. The colonial universities in Africa, put in place by former colonizers, deliberately set the tone for education in Africa. Specifically, the colonizers trained African counterpart-elites—Africans who would merely step into the shoes of outgoing colonial rulers and become the new exploiters of their own people (Ade Ajayi et al., 1996; Mbembe, 2001; Young, 2001). The new
exploiters’ basic weapon was in widening the gap in access to higher education by catering only to those students who had an interest in obtaining higher governmental positions, thereby continuing to serve the interests of the colonizers. To address this situation, reforms to higher education could change this mindset by creating broader access to higher education.

**Limited curriculum.** In brief, the curriculum put in place in the colleges by the colonizers was very narrow in scope, with little improvement in the postcolonial era. In response to this issue, reforms would mandate a much broader curriculum (Armooh 2007; Young, 2001). In such a scenario, courses and curriculum would be culturally appropriate and prepare students based upon their needs as well as societal needs and values. With this increase in offerings, enrollment would not only increase, but the populace would be trained in a wider variety of occupations.

**Degree granting.** Ghana has been part of the colonial legacy that affected the structure of university management and degree-granting. For example, a very typical controversy in the British system centered on the prestige involved in receiving a single-honor specialist degree versus receiving a general degree. This controversy is no longer relevant. The question is which degrees are currently more relevant to the unique needs and aspirations of Ghana as a society as well as those of its individual citizens.

**The “ivory tower” enigma.** Continuing into postcolonial times, the “ivory tower” nature of colleges in the colonial era emphasized the separation of those with higher education from the wider community’s interests. To accomplish this, universities have continued to discourage enrollment by choosing a location that is far from the center of urban life and by separating learning from community engagement (Bok, 2003).
Policy Makers’ Lack of Vision and Support

Although Ghana’s leaders have more recently approached postcolonial education in terms of its assumed contribution to national development, the human approach and broader political implications of education have not been fully comprehended by the policy makers in Ghana (Armooh, 2007; Sackey & Mahama, 2010; Sefa Dei & Opini, 2007). To illustrate, whereas the broader questions of equity and social justice within the Ghanaian education system, such as gender imbalance and inequities in opportunity related to socioeconomic status, have been acknowledged at the rhetorical level, policy makers have failed to concretely address these issues to make a difference in the lives of the Ghanaian students (Armooh, 2007; Obosu-Mensah, 2006; Sackey & Mahama, 2010; Sefa Dei & Opini, 2007). It is evident from past attempts at reforms that policy makers have not taken into consideration the necessity of having available financial support—or at least, realistic strategies for obtaining it—as a fundamental precondition to actual implementation of reforms (Girdwood, 1999).

As seen through the lens of postcolonial theory—critical pedagogy, education in Ghanaian society has created and maintained glaring disparities and inequities, as indicated earlier. Accordingly, this postcolonial pattern, grounded in Ghana’s colonial heritage, has fostered discrepancies in educational opportunity with outcomes that need to be changed (Armooh, 2007; K. Obosu-Mensah, personal communication, July 10, 2010; Sackey & Mahama, 2010; Sefa Dei & Opini, 2007). As stressed by Ameyaw-Akumfi, Ghana’s new minority leader in the Parliament, it is imperative that Ghana’s policy makers be an integral part of any major efforts to reform the country’s education system (Armooh, 2007; Sackey & Mahama, 2010). And of utmost importance, both the
government as well as educators must first arrive at a clearer understanding about how the basic requirements of society have changed in the postindustrial world (National Academy for Academic Leadership, n.d.).

The Community College Solution

In light of the reform needed since the colonial era of British rule in Ghana (Childs & Williams, 1997), the U.S. community college system is advocated by many scholars as a promising model for consideration—one that could bring dramatic change to the Ghanaian higher education system, according to Lorain Community College Professor, Dr. Obosu-Mensah (personal communication, July 10, 2010). Dr. Obosu-Mensah currently has first-hand experience working with politicians and the Ghana Board of Education to establish a sister campus in Ghana. Highlighting the idea of using the U.S. community college model as a beginning solution to the crisis in Ghanaian higher education, this second section of the literature review regarding the community college as a solution examines (a) the rationale underlying consideration of the U.S. community college model, accompanied by a visual model of the community college as proposed for Ghana, (b) evolution of the U.S. community college model—its successes and expansion, and (c) key aspects of its evolution that are particularly applicable to higher education in Ghana.

Addressing the need for reform in the higher education systems of developing countries, Cerych (as cited in Raby & Valeau, 2009) noted over a decade ago, “The existence of a recognized alternative to traditional universities [is] indispensable” (p. 3). Commenting on this statement, Raby and Valeau, (2009) added,
Today, this alternative pathway has become the domain of the community college model which not only offers options for university overflow, but also offers a “second chance” for nontraditional students to achieve a higher education. (p. 3)

The purpose of this study was to examine and provide support for how the U.S. community college model can be used as an agent of change in helping reform Ghanaian higher education, as seen through the lens of postcolonial theory-critical pedagogy. Special emphasis is placed on “access to higher education, from equity to efficiency” (Boughey, 2002, p. 65)—a goal that is highly achievable if the U.S. model is adapted in culturally appropriate and relevant ways to the Ghanaian higher education system. The key words here are access and equity, reflecting core elements of the U.S. model. These basic elements related to Ghanaian education reform are strongly supported by numerous scholars, such as Carey (2009), Mellow and Katopes (2009), Obosu-Mensah (2006), and Raby and Valeau (2009). For these scholars and others, Ghanaian higher education reform must include equal access to education for all Ghanaian children, which is precisely why the American community college model in Ghana should be pursued (Atteh 1996; Atuahene, 2008; Boakye-Agyman, 2006). A major consequence of considering this model as a means of addressing the need for higher education reform in Ghana is that many more students at the senior secondary school level will have the opportunity to make the transition to a Ghanaian university amicably without any hindrances (Obosu-Mensah, personal communication, July 10, 2010; Zeleza & Olukoshi, 2004). This would also lead to a tremendous expansion in enrollment, and indirectly, a major improvement in the quality of education in terms of attention to curriculum reforms.
It is beyond the scope of this study to focus on curriculum. However, the reasons for the success stories of adaptation of the American community college model abroad are based on its emphasis on curriculum theories and best practices, including attention to Freire’s banking concept. Also, the proposed community college model will be affiliated with Ghana’s overall “organization of schooling and how education has long been associated with the idea of a curriculum” (Smith, 2000, p. 1) as a means of reform in educating the marginalized population (Atuahene, 2008; Carey, 2009; Mellow & Katopes, 2009; Obosu-Mensa, 2006). From a macro perspective, developing a community college system in Ghana has the potential of representing a beginning step in closing the economic gap within the country, which has existed since the colonial era of British rule (Armooh, 2007; Atteh, 1996; Atuahene, 2008; Obosu-Mensah, 2006).

**Rationale for Consideration of the U.S. Community College Model for Ghana**

Much can be learned from a speech delivered by the president of war-torn Rwanda, President Kagama, on the issue of promoting the American community college model across Africa as a step in a thousand-mile journey, because “higher education plays an indisputable role in transforming a country” (Mellow & Katopes, 2009, p. 55). President Kagama pointed to the impact of the history of postcolonial ideology that has divided the entire African continent. Consequently, he is currently advocating for the American community college model of education as a solution for addressing the educational pedagogies across the continent of Africa as a whole.

Along with President Kagama, many scholars support the idea of promoting community college models across the globe, especially in the developing world, advocating for the rapid growth of global knowledge across the continents (Atteh, 1996;
Atuahene, 2008; Chrisholm & Leyendecker, 2009; Mellow & Katopes, 2009; Obosu-Mensah, 2006; Raby & Valeau, 2009). In the context of establishing the U.S. community college model abroad, the undeniable success of community colleges in the United States gives relevance to the examination of the model for adoption by the African continent as a whole. As suggested earlier, this model could be used to address Ghanaian educational pedagogies, and in the process, could play a large part in assisting students in their efforts to transition from senior secondary school to higher education (Mellow & Katopes, 2009; Raby & Valeau, 2009).

**Visual model.** A visual model of the U.S. community college model as it is proposed for incorporation into Ghana’s higher education system is presented in Figure 1.

![A Visual Model](image)

**Figure 1.** A visual model of the U.S. community college as a change agent for reform of Ghanaian higher education, as analyzed through the lens of the study’s postcolonial theory-critical pedagogy framework.
In contrast to the situation in Ghana where there is a significant enrollment problem, in the United States, community colleges play a major role in increasing enrollment in higher education. This is in large part due to fundamental factors, such as accessibility, affordability, and adaptability (Schuetz, 2002). Even so, increased enrollment is not just an end in itself for Ghana. Overall, Mellow and Katopes (2009) argued that there could be other, greater benefits to enrollment expansion, such as an increased literacy rate for Ghana and the other developing countries.

**Some overall implementation strategies.** In the context of exploring educational solutions to address the senior secondary school education pedagogies, which are inadequate in preparing students for higher education, President Kagama of Rwanda proposed the strategy of partnerships: “Together with our American partners and friends in the business and academic community, we are keenly interested in executing a strategy of utilizing institutional and human capital from the United States” (Mellow & Katopes, 2009, p. 56). President Kagama saw this partnership as necessary in order to construct a solid and profound educational model on the soil of the continent of Africa.

Creating a partnership with the United States could help countries like Ghana reform their educational system. At the same time, this would be advantageous in promoting global democratic values and goodwill, fitting well with the U.S. government’s international agenda. In McMurtrie’s (2009) article, “Fulbright Program Adapts to Obama Administration’s Priorities,” Romanowski, the new deputy assistant secretary for academic programs at the department's Bureau of Educational and Cultural Affairs, advocated for the expanding role of education. She stressed the need for collaboration between the United States and other countries worldwide on the issue of
transferring the U.S. community college model as a primary step in overhauling the education systems of the developing world. Moreover, Romanowski pointed out that both President Obama and the former Secretary of State Clinton have been strong promoters of the importance of community colleges. In support of this emphasis, Romanowski further stated, “When the Secretary talks about the expanding role of education and collaboration between us and other countries, community colleges are a part of that discussion” (as cited in McMurtrie, 2009, p. 2).

In Romanowski’s view, “Cultural diplomacy [as contrasted with military and economic might] is very much an active part of the tool kit of smart power” (as cited in McMurtrie, 2009, p. 2). As such, it represents a strategy for “creating a partnership for building relationships between the United States and the nations of the developing world toward the goal of helping to fix their broken educational systems” (as cited in McMurtrie, 2009, p. 2). Furthermore, in spite of a diminishing of American hegemony internationally, the world, including Ghana, stills looks to America as the leading champion of modern educational innovations (Atteh, 1996; Atuahene, 2008; Mellow & Katopes, 2009; Obosu-Mensah, personal communication, July 10, 2010).

Proposing another strategy regarding adaptation of the U.S. community college model abroad, Floyd, Skolnik, and Walker (2005) advised that when transferring the American community college model to countries of the developing world, the solution should involve taking stock of the existing situation, rather than blindly making a clean sweep of things. Accordingly, Floyd et al. emphasized that planners must take into consideration the uniqueness of each particular country with its diverse population and its old system of education before making needed adjustments toward change. Take for
example, the polytechnic institution in Ghana: The mission of polytechnic education, which has existed in Ghana as a higher educational institution for training in scientific and technical subjects since 1963, is still in force with no alteration and, in the end, has not contributed to the senior secondary school issues in Ghana, including the transition problem. However, because Ghana already has this vocational school model in place, the vision of establishing community colleges nationwide, along with a newly developed curricular model, requires research and precaution regarding its development and design, such as taking into account the potential of existing structures (Obosu-Mensah, personal communication, July 10, 2010; Sackey & Mahama, 2010).

Corresponding to the above-mentioned strategy by Floyd et al. (2005) and others, one suggestion would be that polytechnic institutions broaden their scope to provide a supplementary means of gaining access to Ghanaian universities. A partnership could be established between all four types of relevant educational entities—the polytechnic institutions, the proposed community colleges, the senior secondary schools, and the universities—in order to create a “seamless transition between high school and college” (Giradi & Stein, 2001, p. 151). Thus, potentially, a major consequence of this four-way partnership would be to reverse the trend for unqualified senior secondary school students to become school leavers.

**Evolution of the U.S. Community College System**

This section of the literature review provides fundamental background information related to the evolution of the U.S. community college system and what aspects of its evolution might be applied to making a change in the Ghanaian higher education system. Such information is pertinent and necessary to a meaningful
exploration of the key aspects of the U.S. model that might be applicable to the Ghanaian situation. Attention to this background information addresses the second research subquestion regarding applicable aspects. To this end, the successful evolution of the U.S. model, along with significant factors regarding its expansion, is presented. The literature review then highlights three of the salient aspects of its evolution that are essential in efforts to change the Ghanaian higher education system: (a) open access to all, (b) transferability, and (c) a more even distribution of community colleges facilities. From a different perspective, the U.S. community college-style education is then examined as a reflection of the country’s societal needs and values, in contrast to Ghanaian postcolonial education. To conclude this literature review, fundamental preconditions related to considering an adapted U.S. community college model for Ghana is discussed.

**Successful evolution and expansion.** Elaborating on the success of the community college model in the United States, Carey (2009) pointed out that the community college system is currently celebrating its 100-year anniversary, with an outstanding record of 1,151 colleges established to its credit, of which 1,004 are publicly controlled. In addition, in the year 2002, almost 10.4 million people were documented as enrolled in community colleges nationwide. In terms of gender equity and age, Carey highlighted the fact that “58% of community college students are female and the average age (regardless of gender) is 29” (p. 1).

In reference to equity in educational opportunity, a report from the National Center for Education Statistics (NCES, 2008) showed that community colleges in the United States have increasingly reached more underachieving students who are seeking a
more affordable alternative to 4-year colleges (see Appendix A). Moreover, the statistics also showed that community colleges meet the needs of a wide range of student types, not solely the low achiever or poorer student, and that many students intend at first to get just a 2-year degree but later, go on to earn a 4-year degree. In addition, U.S. community colleges have shown strong retention rates. Thus, the U.S. community college model manifests the kind of successes that Ghana would like to see in its postsecondary education system. And of great significance, the rapid development and responsive nature of U.S. community colleges would fill an important need Ghana has in future education reforms.

Palinchak (1973) explored the evolution of community colleges, which were initially called junior colleges or 2-year colleges and later became known as “comprehensive” colleges. On a basic level, these community colleges provide the first 2 years of associate’s degree as a stepping stone for transfer to a 4-year college or university. In this regard, of all the undergraduate students who attended college in the year 2002, “44% attended a community college first before transferring to a 4-year college” (Carey 2009, p. 1). Reflecting their absolute transitional capabilities in addressing American educational needs, community colleges became unique and distinct among all other institutional forms of higher learning in the United States (Cohen & Brawer, 2008; Palinchak, 1973). It is within the spirit of this American legacy that establishing an adapted, culturally appropriate community college model in Ghana can make a tremendous difference in rapidly transforming the Ghanaian educational system—a significant reflection of progress and much-needed change in higher education in Ghana (Amenyah, 2009; Armooh, 2007; Obosu-Mensah, 2006).
Factors related to evolution and expansion. As a precursor to the ideological roots of the U.S. community college concept, it is interesting to note that earlier educators in American society envisioned doing away with the rigid barriers between high school and college, wherein students would be able to proceed at their own pace as the best way of providing education to all students (Girardi & Stein, 2001). In fact, the idea of creating community colleges began for the purpose of representing “upward extensions of secondary schools,” according to Cohen and Brawer (as cited in Girardi & Stein, 2001, p. 152).

On a more concrete dimension, in the early part of the 20th century, the expanding role played in the United States by government policy makers contributed to the creation of well-refined community colleges (Bogue, 1950; Cohen & Brawer, 2008). Factors that led to the establishment of community colleges were numerous, but a prominent one was related to the need to address societal shortages, such as the training of workers to operate the nation’s expanding industries and the training of youth to replace the growing number of adults who were facing retirement (Bogue, 1950; Palinchak, 1973; Parnell, 1986). Then, there was the ideological factors that reflected societal striving for social equity, equality, diversity, and social justice, which led to the urgency of understanding that more emphasis should be placed on the creation of community colleges in the United States to fill the gap that existed in the industrial world between the wealthy and those in poverty (Bogue, 1950; Cohen & Brawer, 2008; Palinchak, 1973). Ideologically and of major importance, Schuetz (2002) suggested that the successful history of U.S. community college expansion reflects the community college’s reputation for adaptability to change, affordability, and open access to all.
On the other hand, Parnell (1986) concluded that the great accomplishment of establishing community colleges in the United States was grounded in three important events that have nourished and influenced the course of higher education in this country. Regardless of the circumstances, attention should be paid to these events as a guide to the establishment of an adapted community college model in Ghana or elsewhere in the world. These historical events, which served as precursors to the successful establishment of community colleges in the United States, include (a) the establishment of land grants, such as happened in the United States in 1860, combining theoretical and practical educational activities; (b) passage of the GI Bill of Rights in the 1940s, reflecting the nation’s substantial educational investment in the men and women who served in the Armed Forces; and (c) emergence of the Truman Commission Report in 1947, entitled *Higher Education for Democracy*, which was instrumental in assisting with the rapid expansion of community colleges nationwide (Cohen & Brawer, 2008). Through its guidance and recommendations, this report served as the blueprint for developing higher education in the American post-war era, with a strong emphasis on establishing more community colleges. The subsequent community college model has served the American people well, and the key aspects of this model might be used to meet Ghana’s needs regarding education reform, as discussed below.

**Key Aspects of the Evolution Relevant to Educational Change in Ghana**

The National Center for Education Statistics (NCES, 2008) examined the characteristics of community college students who entered directly from high school and looked at rates of postsecondary persistence and attainment among community college students in general. NCES’s statistics highlighted not only the success but also the
importance of the community college model in the United States (Please refer to Appendix A). Based on these statistics, some of the key aspects that contributed significantly to this success include but are not limited to (a) open access to all; (b) transferability; (c) affordability; (d) adaptability to change; (e) adaptability to societal striving, such as social equity, equality, and justice; (f) diversity of the student body; and (g) more even distribution of community college facilities across community types. Moreover, all seven aspects are especially applicable to efforts to change the Ghanaian higher education system, and in particular, to the development of an effective Ghanaian community college system. For the purposes of this study, the three salient aspects of open access to all, transferability, and more even distribution of community college facilities across community types have been chosen for analysis in terms of how they relate directly to Ghana’s needs related to education reform.

**Open access to all.** Clearly, open access to all is central to the mission and success of the U.S. community college model. In fact, according to Professor Obosu-Mensah of Lorain Community College in Ohio, “Most [U.S.] community colleges have an open-admission policy, meaning almost anybody who can read and write and is willing to study or learn a trade gains admission” (personal communication, July 10, 2010). In support of the establishment of a community college model in Ghana in terms of providing equal educational access and opportunities to all Ghanaians, Dr. Obosu-Mensah emphasized that everybody in Ghana should be given the opportunity to study, irrespective of past educational impediments. Reaffirming the problematic nature of Ghanaian higher education, with its inherent transition problem, he pointed out that with the current admissions policy at universities in Ghana, a large proportion of students are
rejected by the traditional 4-year college system; and with no other feasible options available to them in furthering their education, they are unable to enter a profession or trade. This is seen as one of the major pitfalls experienced by the developing world, in effect representing an “act of exclusion and marginalization in African schooling [which] ought to be understood as an integral part of the social order, social structure and politics of maintaining the status quo” (Stefanos as cited in Sefa Dei & Opini, 2007, p. 464).

In order to achieve the fundamental goal of open access to all via the U.S. community college model, it is important to address the aspects of affordability, diversity, and more equal distribution of colleges across regions, in addition to other inequities in educational opportunity. These components, while listed earlier as separate aspects of the successful U.S. model, are all essential to the fundamental aspect of open access to all (Brumbaugh, 1964). Achieving access to all carries with it the consequence of helping to close the gap that reflects a student’s inability to make the transition to university studies.

In general, hooks (1994) contended that every student’s need for a meaningful education—basically the mandate of access to all—is an appropriate aim regarding the education of the youth of Ghana. This highly advocated aspect, open access to all, applies to education at every level, although the focus of this study is primarily on higher education. Affirming the benefits of open access to education, a recent Ghanaian policy brief stated,

Access to education is seen as both a fundamental human right and an essential element in the national developmental strategy to promote growth and ensure adults are prepared for a productive adult life. Therefore, Ghana’s aspiration to become a middle-income country by 2020 rests in large part on her ability to improve educational access. (Educational Access in Ghana, 2008, p. 1)
And according to Morapedi (2004), educational access to all via establishing community colleges could be “one way of advancing the goals of the African renaissance in the twenty-first century” (p. 533).

**Transferability.** The relationship between senior secondary school and college that promotes transferability represents another critical aspect of the U.S. community college model that can be applied to efforts to reform higher education in Ghana. Brothers and Higgins (2008) pointed out that many transitional support services are needed to “build a solid pipeline from…community colleges to baccalaureate-granting institutions, with a genuine interest in . . . student success” (p. 14). In the article, “State Dual Credit Policy and Its Implications for Community Colleges: Lessons From Missouri for the 21st Century,” Giradi and Stein (2001) claimed that until recently, any meaningful relationship between high school and college occurred more by chance than by design. Therefore, dual credits for high school students would give them the ability to earn community college credits while still attending secondary school, the value of which lies in creating a smooth transition between senior secondary school and an institution of higher learning (Cohen & Brawer, 2008; Giradi & Stein, 2001). This would also allow students to earn college credits without incurring any tuition expenses.

**More even distribution of community college facilities.** As indicated by the NCES (2008) report on U.S. community colleges,

Unlike public and private not-for-profit 4-year institutions, which tend to be in cities, community colleges are distributed more evenly across community types, with 29 percent each in cities and rural areas, 24 percent in towns, and 18 percent in suburban areas. (Section 1, p. 1)
This corresponds to Professor Obosu-Mensah’s (personal communication, July 10, 2010) strong belief that whether in the United States or on a global basis, all children regardless of their geographical location should have the opportunity to be challenged and to excel. Accordingly, this favorable aspect of community colleges in the United States is particularly applicable to efforts to change the Ghanaian education system in terms of broadening the base of students who seek a higher education. In the process, this aspect addresses the current situation that exists in Ghana wherein there are serious inequities related to higher educational opportunities.

**Higher Education as a Reflection of Societal Needs and Values Versus the Impact of Colonialism**

The U.S. history of higher education, and in turn, its curriculum can be considered a “reflection of the shifting perceived needs of the society,” according to Harada (1994, p. 3). In this regard, historically, curriculum has served as “conservator and disseminator of what society has valued” (p. 3). In contrast, Ghana’s history of higher education, along with its curriculum, cannot be considered a reflection of its shifting societal needs and values. For, this does not take into consideration the colonial influence on higher education that basically ignored or reflected a disregard for the indigenous culture of colonized countries, such as Ghana.

A great African scholar, Achebe (1958) was among the first to take up the history of postcolonial Africa in a constructive manner to engage in the debate about the dark side of postcolonial identity. His book, *Things Fall Apart*, conveyed the impact of colonialism on the indigenous culture. The implication here is that in adapting the U.S. community college model to Ghana, fundamental emphasis should be placed on the
people’s culture rather than on importing more foreign cultures to Africa. Achebe’s attention to the importance of indigenous culture fits well with the principle, manifested by the U.S. community college model, that curriculum should be designed to be culturally appropriate—a reflection of societal needs and values. Moreover, attention to a country’s indigenous culture and values coincides with the study’s use of the postcolonial theory-critical pedagogy framework.

However, in order to accomplish such a radical revision of educational philosophy and practice, both the country’s political leaders and educators must come to understand how the basic needs of society have changed in the postindustrial world (National Academy for Academic Leadership, n.d.), as suggested earlier. Furthermore, whether the community college model is established in advanced or in developing countries, the critical point of departure is that it must stimulate “the need for quality post-educational opportunities that are flexible and responsible to local need” (Raby & Valeau, 2009, p. 1).

The notion that higher education should reflect societal needs and values represents an ideological viewpoint that is not new to Ghana. In fact, the 1925 document, “The Education Policy in British Tropical Africa Act Defined,” is still a timely guide for taking into account the needs and aspirations of the Ghanaian people in relation to their educational structure and the subsequent direction of the curriculum that is developed. In this early document, Graham (as cited in Sentell, 2000) stated,

Education should be adapted to the mentality, aptitudes, occupations and traditions of the various people, conserving as far as possible all sound and healthy elements in the fabric of the social life, adopting them where necessary to change circumstances and progressive ideas, as an agent of natural growth and evolution….Education, thus defined, will narrow the hiatus between the educated class and the rest of the community whether chiefs or peasantry. (p. 3)
In light of this discourse, it can be said that the effectiveness of the community college model rests not only on its curriculum, but also on its adaptability to the needs of its students, and indirectly, the needs and values of society (Cohen & Brawer, 2008; Graham as referred to in Sentell, 2000).

On a broader scale, the vision of Ghana’s first Prime Minister Nkrumah also speaks to the notion of education—especially higher education—as a reflection of societal needs and values:

[We] must seek an African view to the problems of Africa. This does not mean that western techniques and methods are not applicable to Africa. It does mean, however, that in Ghana we must look at every problem from the African point of view. (as cited in Akyeampong, 2010, p. 2)

**Preconditions for Designing a Community College Model**

As a fundamental guide to serious consideration of the U.S. community college model for use as a change agent in addressing the present Ghanaian higher education crisis, the adherence to ideological preconditions is essential. In this respect, Mellow and Katopes (2009) proposed a framework that stipulates preconditions for designing a community college model in the developing world. Their framework, highly applicable to Ghana’s situation, is based on four major principles, all of which have been mentioned earlier in more general terms, but coalesce here as follows:

- The community college itself should be an open-access institution that provides educational opportunities for anyone, including the opportunity to take the GED as the basis for enrolling in higher education;
Such institution should offer a wide range of career and technical degrees and certificates, adapted to the local job market in such a way that allows, after 2 years of full-time study, for employment in middle-skilled jobs;

The community college and its curriculum should be structured to provide a pathway to the highest levels of a university education through the transfer of credits;

Its curriculum should be designed to serve as a vehicle for continuing education, responsive to local community needs by offering thus: “a range of educational experiences to adults for the development and refinement of everything from basic literacy to advanced computer skills tied to a specific business or industry” (Mellow & Katopes, 2009, p. 58).

By following these four underlying principles regarding implementation of an adapted version of the U.S. community college model, Ghana could be in a position to both address the current problems in its higher education system, including its transition problem, and in the process, do away with the colonial mentality tied to these problems. In short, this framework of preconditions addresses the need to provide postsecondary education to Ghana’s adult population and to create a better link between secondary schools and universities (Armooh, 2007; Atteh, 1996; Sackey & Mahama, 2010).

**Summary**

Regarding the analysis as to how the current crisis in Ghana’s higher education system developed, two fundamental factors were highlighted in the literature review on this topic: the far-reaching impact of the colonial legacy on postcolonial higher education and the role of policy makers in shaping the current situation. As seen through the lens of
postcolonial theory-critical pedagogy, the literature pointed to colonial penetration of higher education in the postcolonial era as manifested by present-day administrators and managers and the narrow curriculum that tends to favor a few single-honor degrees rather than offering diverse courses, degrees, and pathways that meet the needs of the community, marketplace, and workforce. The curriculum still reflects the interests, values, and pedagogies of the colonizers. Moreover, the separation between “the educated” (those in higher education) from the community and its interests—a kind of “ivory tower” mentality—is still evident.

Another major factor brought to light in the literature that contributed to Ghana’s higher education crisis was the role policy makers played. Basically, policy makers have acknowledged the importance of education to national development, but the broader issues of equity and social justice (e.g., gender inequality and inequities in opportunity based on socioeconomic status) have only been addressed at a rhetorical level. Little change has been experienced by students in regard to the access problem in higher education. Yet, the policy makers’ role is crucial in attempts at meaningful reform. As pointed out in the literature, the government, together with educators, must start by gaining a clearer understanding as to how the basic requirements of society have changed in the global economy of this post-industrial era.

It has been a widespread conclusion in the literature that change is therefore needed—a solution or alternative pathway. The general goal of such reform for Ghana was captured by Boughey (2000) with the words, “access to higher education, from equity to effectiveness” (p. 65). These represent the core elements of the U.S. community college model that is proposed as a solution to Ghana’s higher education problems,
particularly in terms of its transition issue. The rationale in the literature for considering this solution is based on the tremendous expansion and success of the U.S. model, which among other key factors has been attributed not only to the strong support it received from U.S policy makers, but also adaptability to change, affordability, and the fundamental aspect of access to all. The importance of transferability (e.g., dual credits) and the even distribution of community colleges across community types have also been emphasized in the literature, but in the bigger picture, these and other salient aspects of the U.S. model all contribute to the end result of access to all and equity of opportunity.

Another essential aspect of the community college model, emphasized in the literature review, is that the community college, as represented in its curriculum, is necessarily a reflection of U.S. societal needs and values. This coincides with the mandate of proponents of postcolonial theory and critical pedagogy that any solution to Ghana’s higher education problems must reflect Ghana’s indigenous culture, societal needs, and values. Ghana’s first Prime Minister Nkrumah stated this simply and concisely: “[We] must seek an African view to the problems of Africa” (as cited in Akyeampong, 2010, p. 2).
CHAPTER 3. RESEARCH METHODOLOGY

This chapter begins with a discourse regarding the rationale for choosing the qualitative research approach for exploring the study’s topic. Within the qualitative framework, I provide reasons for selecting case study methodology and define the research question and sub-questions. The case study is then examined, both generally and in specific relation to the research in terms of its nature, design, and data collection. Special attention is given to methods of inquiry—the study’s use of research tools—along with an explanation of why a variety of information-gathering methods enhanced the quality of this study. Next, I describe the data analysis used, with emphasis on the two-cycle coding system and, in turn, a brief look at the final stage of the case study process: interpretation of the analyzed data in the form of a final report. Finally, trustworthiness and the limitations of the study are discussed, followed by a summary.

Qualitative Research

A qualitative method was chosen for this research study primarily because it allows for an in-depth, interpretive, and holistic description of the topic under consideration (Creswell, 2007; Stake, 1995; Yin, 2009). However, there are other characteristics of this method of inquiry that made it a good fit for the research. For example, qualitative research is most often exploratory and is conducted in a natural setting, in the field where the participants are actually experiencing the issue or problem (Creswell, 2007). Moreover, as the researcher, I was the key instrument of data
collection—the one who gathered the data, such as by conducting interviews and observing behavior. In this way, as the researcher, I was able to create a personal relationship with the participants.

Qualitative inquiry allowed for the use of multiple sources of data, which were then analyzed by an inductive process whereby I, as the researcher, looked for patterns and themes that emerged from the data (Creswell, 2007; Stake, 2005; Yin, 2006). Qualitative research explores not only the what, where, and when, but also the why and how in relation to the topic being studied (Yin, 2003). Also, qualitative researchers often use a theoretical lens through which to view the topic of study (Creswell, 2007; Patton, 2002; Yin, 2003), such as the postcolonial theory-critical pedagogy lens used in this study. Overall, qualitative research was especially well suited to this study, because in recent times, this approach has come to be defined more in terms of its transformational quality—its impact on the world in regard to a specific issue (Creswell, 2007).

**Purpose of the Study and Research Questions**

The purpose of this single albeit complex case study was to construct evidence that supported consideration of the U.S. community college model as an alternative solution for effecting change within Ghana’s higher education system. Primary focus was on the need to reform this system in regard to the transitional capabilities of senior secondary school students (hereafter referred to as the transition problem), particularly in regard to issues associated with equity and access to all, in addition to the hindrances that make this current problem so challenging.

The following primary research question and sub-questions were supported by the methodology described in this chapter:
How can the U.S. community college model be used as an agent of change—an alternative option in addressing the present Ghanaian higher education crisis?

1. What major issues of Ghana’s higher education system need reform, particularly in relation to the transition problem, and how can the issues of access and inequities in opportunity be resolved?

2. What applicable aspects of the U.S. community college model can make a difference in higher education reform in Ghana, particularly in terms of the transition problem?

Consistent with qualitative research ideology, in addition to what questions regarding the research question and sub-questions, I explored the why and how related to transferring the U.S. community college model to Ghana. To accomplish this, the case study was broken down into two subunits of analysis, which are discussed later. The information to be gained from an in-depth exploration of these two subunits was particularly relevant to the two sub-questions, which in the end, informed the primary research question.

It is important to note here that originally, in the preliminary planning stage of the study, the primary research question, along with three research sub-questions, constituted the core of the study. However, because qualitative research is emergent in nature (Yin, 2003), even these key questions were subject to change when it was discovered, during the data collection stage, that a modification of the sub-questions would better serve the study’s topic and purpose. I remained flexible in this regard (Creswell, 2007; Merriam, 1998; Patton, 2002; Yin, 2003); although no additional information of significance emerged, the original first research sub-question was integrated into the second research
sub-question (thereby eliminating one sub-question). As a result, the final study was guided by the same primary research question and two research sub-questions, as shown above.

**Overview of Case Study Methodology**

In defining case study research from a qualitative perspective, Creswell (2007) described the process and methodology that involves the study of “issues explored through one or more cases within a bounded system (i.e., a setting, a context)” (p. 73). I adopted the qualitative case study method primarily for this general reason and also because it “excels at bringing an understanding of a complex issue or object and can extend experience or add strength to what is already known through previous research” (Soy, 1997, p. 1). Moreover, the fact that case study methodology is particularly suited to an exploration of processes (Creswell, 2007; Merriam, 1998) made it a good fit with examining the nature and processes inherent in this particular study from both a practical and theoretical standpoint.

Case study methodology is especially conducive to the situation where “a ‘how’ and ‘why’ question is being asked about a contemporary set of events, over which the investigator has little or no control” (Yin, 2003, p. 9). For example, in this study, the main research question asks *how*—in what ways—the use of the U.S. community college model might be used as an agent of change. Moreover, the first sub-question asks *why* in relation to the transition problem being a key component of Ghana’s higher education crisis; and the second part of the second sub-question asks *why* regarding the issues of access and inequities in opportunity.
It has been pointed out by some scholars that case study research is basically about the selection of what is to be explored within a bounded system (Stake, 2005; Yin, 2003). As researcher, I also favored this interpretation, which highlights the importance of selecting what phenomena should be explored within the bounded system of the case. For example, what aspects of the current Ghanaian higher education system are in need of reform, and equally important, what salient aspects of the U.S. community college model must be identified prior to answering the primary research question regarding how the U.S. community college model can be used as an agent of change.

**Procedural Protocol for Conducting a Case Study**

Prior to the actual start of this research project, approval from the Institutional Review Board (IRB) was granted. Upon IRB approval of the study, to begin the research process, a case study research plan was implemented, accompanied by protocols. According to Creswell (2007), Merriam (1998), Stake (1995), and Yin (2003), the procedural protocol involves sequential steps in conducting case study research that should be taken to avoid redundancy and also to ensure an appropriate research protocol. Some of their recommendations and explanations associated with procedural protocol are presented below, along with a brief account of how I addressed each point:

1. Determine if a case study approach is appropriate to the research problems. Case study represents a good approach if the researcher has clearly identified the boundaries and seeks to provide an in-depth understanding of the case under investigation (Creswell, 2007; Merriam, 1998).
   - The boundaries of the case in this study encompassed the areas of interest contained in examining the main research question, which asks, How can the U.S.
community college model be used as an agent of change—an alternative option in addressing the present Ghanaian higher education crisis? Subsequently, the goal of this study was to gain and present an in-depth understanding of findings that addressed this question. Such interpretations of the findings are presented in Chapter 5.

2. Identify the scope of the case study to determine which type of case study is most useful regarding the focus of the issues involved. That is, determine whether the case study should be one that can be considered single or collective/multiple and instrumental or intrinsic (Creswell, 2007; Stake, 1995; Yin, 2003).

- Accordingly, I chose a single case study approach that was instrumental in intent and exploratory in design, as is explained in the following sections.

3. Be prepared for the fact that the data collected in case study research is extensive in scope, collected by a variety of methods (e.g., interviews, observation, documentation, archival material, physical artifacts, and audiovisual materials (Bickman & Rog, 2008; Creswell, 2007).

- This was taken into consideration in the present study in that an organized data base was set up to manage data from the interviews, observation, and documentation.

4. Determine whether the data analysis in a single case study is to be holistic or an embedded analysis of one or more specific aspects of the case, or both (Yin as referred to in Creswell, 2007). The holistic type of analysis entails looking for oceans of information regarding the entire case to be researched. An embedded analysis involves looking for specific information related to one or more aspects
of the case (Yin, 2003). A complex case study can involve both holistic and embedded types of analysis.

- This study involved both embedded and holistic types of analysis. However, primarily it involved an embedded approach to analysis, as is explained later. Secondarily, the analysis was holistic in terms of its attention to looking at the bigger picture of the information gathered and interpreted.

5. Report the meaning of the case study, in the last stage of the methodological process, through discussion and explanation regarding the general use of the case study research, for the purpose of informing the primary research question. This final stage is considered the interpretive phase of the case study research process (Creswell, 2007; Patton, 2002).

- This recommendation was followed closely, particularly in regard to achieving the study’s goal of presenting an in-depth understanding of the main research question.

Thus, beginning with the data collection process and continuing onward through data analysis to the final report, the above-described basic steps and principles dictated the procedural protocol that was used in this study.

**Case Study Design**

Based on the purpose of this study, I chose a single case study design—one that was multi-sited and exploratory regarding approach, and instrumental in terms of intent. In general, a research design—or plan—“is the logic that links the data collected to the initial questions of the study” (Yin, 2003, p. 19), and in turn, to the conclusions that pertain to these questions. Accordingly, as the researcher, I utilized a case study design—
followed a logical plan—that (a) began with determining the initial research questions to be explored and defining the main unit and subunits of analysis of the case study, followed by (b) collecting relevant data with the multiple methods of inquiry that were chosen, (c) conducting an analysis of the data, and finally (d) interpreting the data to arrive at conclusions (in a final report) that should directly inform the initial questions.

Overall, the case study design that I developed for this research project can be considered a “blueprint” for dealing with four basic challenges: (a) what questions should be studied, (b) what data can be considered relevant, (c) what data should be collected, and (d) how should the data be analyzed (Philiber, Schwab, & Samsloss as referred to in Yin, 2003).

Instrumental Case Study

The main goal of this instrumental case study was to gain an in-depth understanding of the central issue of resolving Ghana’s transition problem as a major manifestation of Ghana’s crisis in higher education. Although I was still very interested in the case from an internal perspective (as in the intrinsic case study), the main goal or intent of the study was to use the final report for further purposes (Stake, 2005), that is, to provide insight into how this information can be used to effect change in Ghana’s higher education system, and in particular, its transition problem. From a more global, ideological standpoint, the findings regarding this proposed solution will be used to address the ideological, academic, and moral issues of building the infrastructure of the young, independent Ghanaian society without depriving the various sectors of society of the right to have equal access to and equity of opportunity in education.
Exploratory Approach

Case study design can be said to manifest three types of approaches: exploratory, descriptive, and explanatory. And whereas any case study may utilize each of these approaches to varying degrees, one of the three types usually predominates. I chose the exploratory approach because of its usefulness, according to Creswell (2007) and Yin (2009), when the researcher is seeking to understand what specifically is needed to be studied in order to understand the phenomena associated with the case study, as explained earlier. Furthermore, although this study was first and foremost an exploratory one, it can secondarily be considered a descriptive qualitative approach in that it provided detailed information about the particular issues, interactions, and characteristics of the subunits of analysis (Patton, 2002; Yin, 2006). Moreover, it used a descriptive approach in its effort to “present a complete description of a phenomenon within its context” (Yin, 2009, p. 33). For example, this study described in detail, from various perspectives, the salient aspects of the U.S. community college model that are applicable to an adapted version for Ghana.

Embedded, Single Case Study Design: Unit and Subunits of Analysis

On another dimension, whether primarily instrumental or intrinsic, exploratory or descriptive, the single case study has two variants: the holistic design and the design that contains embedded units/subunits of analysis (Yin, 2003). Again, whereas the case study can manifest both of these variants, one will be more dominant. In this respect, I chose as more dominant the embedded version of the single case study. In contrast to studying the case solely from a global standpoint that requires a holistic design, this study fit Yin’s (2003) description of a single case study that involves “more than one unit of analysis.
This occurs when, within a single case, attention is also given to a subunit or subunits….The resulting design would be called an *embedded* case study design” (p. 42). Helping to provide the rationale for this study’s exploration of a single case in terms of its main unit and subunits of analysis, Stake (2005) explained,

> The case is singular, but it has subsections…groups…occasions…dimensions, and domains….Each of these may have its own contexts, and the contexts may go a long way toward making relationships understandable. (p. 449)

**Main unit of analysis.** Utilizing an embedded design, the main unit of analysis for this complex, single case study can be defined as the central issue of determining how the U.S. community college model can be used as an appropriate and feasible solution to the Ghanaian higher education crisis, particularly in relation to its transition problem. This main unit of analysis replicates the study’s primary research question.

**Subunits of analysis.** Two key issues that were critical to an overall understanding of the case (the main unit of analysis) were designated as the subunits of analysis in this study. In other words, these two subunits were embedded in the main unit of analysis and essential to an understanding of it. These subunits include (a) major issues of current, postcolonial Ghanaian higher education that impact its transition problem, and (b) applicable aspects of the U.S. community college model that can contribute to solving the transition problem and, in turn, reducing the high rate of “school leavers.” The subunits, treated as embedded cases within the main single case, were examined in depth, with a focus on selected issues of concern therein.

These subunits of analysis meet Yin’s (2003) definition of the case study approach, described earlier, by answering the basic *what* question regarding the particular phenomena to be studied within the bounded system and by being directly relevant to
informing the main unit of analysis. Further, these subunits directly relate to the study’s research sub-questions, as mentioned earlier.

**First subunit of analysis: Issues impacting Ghana’s transition problem.** One of the two primary subunits of analysis for this complex case study was major issues of the current Ghanaian higher education system that impact its transition problem. In a sense, exploring this subunit was analogous to putting Ghana’s higher education system on trial in its current state—a system that was put in place by the former British powers and continues to be followed to this day in the postcolonial era. Because this subunit of analysis is systemic in scope, there are a wide range of possible issues embedded in it that could be explored and described. However, keeping in mind the study’s main topic (or unit of analysis), I chose to focus on the interrelated issues of lack of access and inequities in educational opportunity. In doing so, it was of utmost importance that these issues were explored and analyzed through the theoretical lens of postcolonial-critical pedagogy.

**Embedded issues of access and inequities in educational opportunity.** The embedded issues of access and inequities in opportunity can be examined from various standpoints. Whereas this case study was open to all perspectives that emerged from the data, special attention was paid to how they were related to the current, postcolonial structure, pedagogy, and curriculum components of higher education in Ghana. Of these components, the importance of using the postcolonial theory-critical pedagogy theoretical lens in this study is most evident regarding exploration of the issue of pedagogy. For example, Freire’s (2006) banking concept ideology was contrasted with the current colonial-style, authoritarian pedagogy of Ghanaian higher education. Both pedagogies
were given fair attention, with the rationale behind the continuing existence of the traditional pedagogy in Ghana pitted against the need to change to Freire’s enlightened teaching-learning concept. In regard to the component of structure, which directly and indirectly impacts access and inequities in educational opportunity, exploration and analysis was directed to problems related to both infrastructure as well as external issues/structures. For example, the study examined the glaring need for expansion of higher education facilities to help address the demand-supply gap in tertiary student enrollment, a problem resulting in such repercussions as extreme competitiveness and corruption in the public universities.

Curriculum represents the third key component embedded within the issues of access and inequities in opportunity, which are, in turn, embedded in this first subunit. Similar to the other two components, curriculum was explored in terms of general ways it could be improved or changed in order to impact the transition problem and, ultimately, the entire higher education system. More specifically, in the data collection stage, for example, it was essential to ask the Ghanaian professors teaching in both Ghana and the United States, as well as the senior civil servant from the Ministry of Education and the education consultant—as participants—pertinent questions regarding their perceptions, opinions, and perspectives as to why Ghanaian students are having difficulty passing the entry level examination (i.e., the West African Senior Secondary Certificate Examination) to enroll in a public university. Similarly, it was important to ask questions of the professors and non-teaching educators that revealed their perceptions of what is blocking the students’ understanding and functionality related to attempting to enter a higher education institution. It is hoped that from the gathering of data of this nature,
some light will be shed for educators on curriculum content and delivery in terms of
general design and goals, and on related pedagogical issues, such as if, how, and why the
instructors’ methods and teaching skills affect students’ transition capabilities.

Second subunit of analysis: Applicable aspects of the U.S. model. The second
subunit of analysis entailed exploring what applicable aspects of the U.S. community
college model can make a difference in higher education reform in terms of resolving the
transition problem. As a complex, embedded case within the main case, this subunit
contains many issues (similar to the first subunit) that could potentially be explored.
However, for the purposes of this study, I selected the issue concerning exploration of
what applicable aspects of the U.S. model appear most appropriate and relevant for
inclusion in the Ghanaian community college model—and why, based on evidence
obtained from this study. Importantly, it was considered crucial that any conclusions
regarding such aspects take into consideration not only Ghana’s indigenous culture,
needs, and values, but also the findings from the first subunit of analysis—what elements
of the current Ghanaian system need reform regarding the transition problem.

Role of the Researcher

It is well recognized that researchers “bring their own worldviews, paradigms, or
a set of beliefs to the research project, and these inform the conduct and writing of the
qualitative study” (Creswell, 2007, p. 15). Thus, it is of central importance that the
researcher explicitly identifies his or her assumptions, set of beliefs, and biases.

My philosophy consists of many paradigms, but the one that has interested me
most in shaping my thinking as a researcher is that of social constructivism. According to
this paradigm, it is important to listen very carefully to what the participants say and do—
their particular contexts—“in order to understand the historical and cultural settings of the participants” (Creswell, 2007, p. 21). Along with this primary paradigm should be added, to a much lesser extent, the post positivism, pragmatism, and advocacy/participatory paradigms (Creswell, 2007; Patton, 2002). It is more meaningful perhaps for me to say I have been influenced by a combination of all of these ideologies. Nevertheless, I recognize that each one influences the practice of research differently (Creswell, 2007; Merriam, 1998).

I am particularly influenced by social constructivism, which when combined with other philosophies of interpretation, creates my own unique worldview. This can be seen as nothing more than the individual’s (my) search for the meanings and understanding of the world in which we live and work. Thus as a social constructivist, I construct meanings from my past and present experiences—meanings related to particular things, people, and events. Over the years, these meanings have been varied and numerous, leading me, as the researcher, to view the meanings I have constructed as complex rather than fitting into just a few categories of ideas (Creswell, 2007; Patton, 2002; Stake, 2005).

Applicable to this case study, I recognized that any interpretations of the data that I made were thus shaped by meanings I have constructed regarding my own background and experiences. Similarly, the participants constructed their own meanings about the phenomena they were asked about. From this perspective, I came to understand that when analyzing the data for this case study, my goal as researcher—as the constructivist—was to rely, to the greatest extent possible, on the participants’ views regarding the research topic (Creswell, 2007; Patton, 2002; Yin, 2009). To this end, I used their own words
whenever possible in reporting the findings in Chapter 4. Similarly, in Chapter 5, my analysis and interpretation were based directly on their perceptions, opinions, and perspectives.

Furthermore, being a constructivist shaped my beliefs and values regarding the nature of the researcher-participant relationship. Essentially, this relationship can be characterized as having been more cooperative and empowering (in contrast to that in a quantitative study), and as such, allowed me to work toward reducing all negative interactions that might emerge in the process of researching (Creswell, 2007; Patton, 2002). This type of researcher-participant relationship supported my ultimate research goal of achieving harmony and respect.

**Data Collection**

The actual process of data collection in a case study should provide thick, rich description, drawn from a variety of sources and/or methods of data collection (Merriam, Stake, & Yin as referred to in Creswell, 2007). Moreover, when exploring the perceptions and insights of the professors and non-teaching educators, regardless of the methods of inquiry used, as the researcher, I strove to capture the multiple realities that emerged (Creswell, 2007; Patton, 2002). According to Creswell (2007), pertaining to the data collection process, “evidence of multiple realities includes the use of multiple quotes based on the actual words of different individuals and presenting differing perspectives from individuals” (p. 18). Thus, it was critical to the accuracy and credibility of the present study’s findings that the voices of the participants be carefully listened to and accurately reported.
General Principles Guiding Data Collection

Regardless of which of the many sources of evidence that I chose to use, Yin (2003) suggested three principles that would enhance the construct validity and reliability of any case study:

1. Use multiple sources of evidences
2. Create a case study database
3. Maintain a chain of evidence

All three of these principles were followed in the study, beginning in the data collection stage. A brief discussion of each of these principles is provided below.

Using multiple sources of evidence: Triangulation. “A major strength of case study data collection is the opportunity to use many different sources of evidence” (Yin, 2003, p. 97). I used several methods of inquiry for data collection, based on the notion that a study’s findings are more credible (suggesting qualities of comprehensiveness, accuracy, and rigor) when multiple sources of evidence have been employed (Creswell, 2007; Patton, 2002). These sources, which include the open-ended, personal interview; direct observation; documentation; and archival records, were utilized to develop converging lines of data or triangulation. Simply stated, triangulation of the data allowed for cross-checking among different data sources (Creswell, 2007; Patton, 2002; Yin, 2006). With this strategy, which can be characterized as “following a corroboratory mode” (Yin, 2003, p. 98), I was able to confirm the same fact or phenomenon that one or more other methods of data collection had already identified in the study. Figure 2 illustrates two scenarios related to the use of multiple sources of data: one that results in triangulation and the other that really does not triangulate the data.
CONVERGENCE OF EVIDENCE  
(Single study)

Archival records  
Documents  
Open-ended interviews  
Observations  
(Direct and Participant)  
Structured Interviews and surveys

NON-CONVERGENCE OF EVIDENCE  
(Separate sub studies)

Site visits  
Survey  
Documents  
Analysis  
Findings  
Findings  
Findings  
Conclusions  
Conclusions  
Conclusions

*Figure 2*: Depiction of convergence and non-convergence of multiple sources of evidence. Adapted from COSMOS Corporation as cited in *Case Study Research: Design and Methods* (3rd ed.) by R. K. Yin, 2003, p. 100.

Similar to what was achieved in the present case study (but which used three methods of inquiry: the in-depth interview, direct observation, and documentation), the first scenario in Figure 2 represents triangulation, the actual convergence of evidence to support the *same* events or facts. In contrast, in the second scenario, although multiple sources of data are used, each source has been analyzed separately and then compared to the conclusions, but the data has not been triangulated—the same events or facts were not corroborated.
**Creating a case study database.** Case study research can be seen as nothing more than the use of multiple sources of information to generate a large ocean of information, which is then analyzed (Creswell, 2007; Yin, 2006). Thus to ensure that the large volume of information collected in this study became and remained organized and accurate, a detailed, analytical database was constructed that contained all the information collected throughout the entire case study process, as stressed by Yin (2006). Further, after being reflected upon, the database for this study was divided into sections and both primary and secondary files pertaining to the study’s case study notes, documents, and narratives. This helped to distinguish various documents and at the same time ensured proper organization for efficient usage in future research (Creswell, 2007; Patton 2002; Yin, 2009).

Representing the most important component of this study’s database, the case study notes were taken from the interviews and direct observation, as well as from document analysis. Some of these notes were initially handwritten and some were audio-taped and in the form of computer files (Creswell, 2007; Yin, 2003). In short, these forms of data were “organized, categorized, complete, and available for later access,” as suggested by Yin (2003, p. 103). Regarding the numerous case study documents that were used in this case study, I followed the recommendation that an annotated bibliography be created that could be easily retrieved (Patton, 2002; Yin, 2009). Also, as part of the database, I also included narratives—the developing of answers to the questions in the case study protocol (Creswell, 2007; Patton, 2002; Yin, 2009). These answers or narratives reflected my attempt to link specific evidence to issues related to
the primary research question and sub-questions of the study, as suggested by Creswell (2007) and Patton (2002).

**Maintaining a chain of evidence.** The third principle this study followed as a strategy to increase its construct validity—reliability of the information that forms the basis of the case study’s findings—was to maintain a chain of evidence (Patton, 2002; Yin, 2003). The purpose of this principle is analogous to the notion used in the forensic investigation of evidence from a crime scene, which in turn, is presented in a court of law (Creswell, 2007; Yin, 2003). Maintaining a chain of evidence allows an external observer, in a systematic way, to trace the evidence obtained from the beginning of this study, starting with the initial research question and sub-questions, and continuing through the research process to the conclusions in the final report. This means that in the present study, if a chain of evidence were maintained regarding questions of how, why, and when, the observer could then trace the steps in either direction, especially from the conclusion back to the beginning as well as forward to the end (Creswell, 2007; Patton 2002; Yin, 2003).

In endeavoring to maintain this chain of evidence, I followed the directives suggested by Yin (2003):

1. The report itself should have made sufficient citation to the relevant portions of the case study database—for example, by citing specific documents, interviews, or observations;
2. The database, upon inspection, should reveal the actual evidence and indicate the circumstances under which the evidence was collected—for example, the time and place of an interview;
3. These circumstances should be consistent with the specific procedures and questions contained in the case study protocol, to show that data collection followed the procedures stipulated by the protocol;
4. A reading of the protocol should indicate the link between the content of the protocol and the initial study questions. (p. 105)
At all times, the focus of maintaining a chain of evidence was on the issues surrounding the study’s main topic or unit of analysis—consideration of the solution of exporting an adapted version of the U.S. community college model to Ghana to address the Ghanaian higher education crisis, with special emphasis on the transition problem. Figure 3 represents a general depiction of maintaining the chain of evidence that was followed in this study in taking control of the case.

![Diagram](http://example.com/diagram.png)

*Figure 3: Maintaining a chain of evidence.* Adapted from COMOS Corporation as cited in *Case Study Research: Design and Methods* (3rd ed.) by R. W. Yin, 2003, p. 106.

**Units of Data Collection**

Units of data collection are not to be confused with the main unit and subunits of analysis (Creswell, 2007; Yin, 2003, 2006). In this study, the *units of data collection* were individuals within the organization or system under investigation who were interviewed as a necessary source of evidence. In contrast, the main *unit and subunits of*
analysis in this study were related to the overall organizational or system-type issues being explored.

More specifically, the units of data collection consisted of individuals directly related to one or the other of the two subunits of analysis discussed earlier. Thus, addressing the subunit of analysis, major issues of the current Ghanaian higher education system that impact its transition problem, there were three sets of units of data collection—three groups: (a) Ghanaian professors who taught at a Ghanaian public university, (b) Ghanaian professors or lecturers who were currently teaching at a community college in the United States, and (c) two Ghanaian non-teaching educators—a senior civil servant from the Ghanaian Ministry of Education and an education consultant.

For this first subunit of analysis, the in-depth interviews with the Ghanaian professors teaching in both Ghana and the United States (see Appendices F and E for the interview guides, respectively), as well as the non-teaching educators (see Appendix F), were conducted from a postcolonial theory-critical pedagogy standpoint, which reflected the theoretical framework that guided this study. With a focus on the major issues of the current Ghanaian education system that impact the transition problem, these interviews sought to explore the embedded primary postcolonial issues of access and inequities in opportunity and how the components of structure, pedagogy, and curriculum impact these primary issues. The expectation was that the data gathered during the interview process would help make evident how and why the transferring/exporting of the U.S. community college model might be competitively advantageous in Ghana as well as throughout the continent of Africa as a whole.
Regarding the study’s other subunit of analysis, *applicable aspects of the U.S. community college model that can make a difference in the transition problem*, the units of data collection primarily included professors from Ghana who are currently teaching at community colleges in the United States (see Appendix E for the interview guide). To a somewhat lesser extent, the other two groups (sets of units of data collection)—the Ghanaian professors teaching in Ghana and the non-teaching educators—were also included for their feedback on this second unit of analysis. In explanation, the primary interview focus for these latter two groups was on the current problems facing the Ghanaian higher education system and the resultant transition problem. But it was also important to ask them about their familiarity with the U.S. community college model and the possibility, feasibility, and hindrances they perceived in considering it as a solution to Ghana’s higher education crisis.

It was originally anticipated that the overall result of the interviews with Ghanaian professors in the United States would be a collection of data that reflected a combination of carefully scrutinized aspects from various versions of the U.S. community college model across the country in an effort to arrive at a Ghanaian brand of community college for Ghana. In actuality, this expectation was realized in that these Ghanaian professors and lecturers represented three different U.S. community colleges from various regions of the country. In the end, these professors, as units of data collection, were interviewed for the purpose of strengthening the argument as to how and why the introduction of community colleges could help alleviate the burden on society caused by the high rate of school leavers—the discontinued students—in Ghana.
Sampling

As the dominant method of inquiry for this case study, the in-depth interview was particularly conductive to the participant selection procedure called snowball sampling (Creswell, 2007; Stake, 1995). Simply stated, snowball sampling entails the process wherein one or more persons—key informants—who have a grasp of the study’s topic, suggest one or more other individuals who might be able to provide relevant evidence that will contribute to the research question. Such individuals may, in turn, suggest others who would be helpful to the study, and so on.

It was essential, however, that the potential participants identified through snowball sampling in this study be purposefully selected in order to maximize the richness, scope, and relevancy of the information gathered. Purposeful sampling involves selecting participants “because they can purposefully inform an understanding of the research problem” (Creswell, 2007, p. 125); and in the present study, this included informing an understanding of the issues embedded in the respective subunits of analysis.

For the in-depth interviews that were conducted, the simple criteria for participation as an interviewee in the study included (a) status as a Ghanaian professor at the specified institution of higher learning (in Ghana or the United States), (b) interest in and willingness to contribute to an understanding of the targeted issues, and (c) willingness to commit time and effort to an in-depth interview of 1 to 2 hours. The actual interviews lasted from 1½ to 2 hours. Following Creswell’s (2007) and Patton’s (2002) suggestions, the sample size for each group of professors (in Ghana and in the United States, respectively) was 5 participants. (See Appendix D for the recruitment letter).
Gaining Access

Gaining access to participants in the Ghanaian higher education system as well as the U.S. community college system in order to conduct this case study research might have been a difficult task. However, benefiting from the advantage of being Ghanaian myself and having lived and attended school in Ghana, I began early on to address these challenges. For example, I initiated the communication process with some outstanding Ghanaian professors who were currently teaching in the U.S. community college system. Similarly, I made initial contact with some professors teaching in public universities in Ghana. For all of these early personal contacts, I provided pertinent information about myself as well as the proposed study, including its purpose, theoretical framework, data collection strategies, confidentiality issues, and benefits of undertaking this research study. It was my hope that these beginning efforts to develop rapport with potential participants or key informants would greatly assist my later efforts regarding access to essential data for this case study. My hopes were realized in this regard.

Data Collection Instrument and Strategies

As the primary researcher of this case study, I was thus the primary instrument of data collection. The most commonly used data collection strategies include interviews, direct observation, documentation, archival records, participant-observation, and physical artifacts (Creswell, 2007; Saldana, 2009; Yin, 2006). As indicated earlier regarding the use of multiple sources for the purpose of triangulation, I chose three of these six methods: (a) in-depth interviews, (b) direct observation, and (c) documentation. A brief description of each of these methods as well as their particular use in this study is provided below. (Also refer to Appendix B).
**In-depth interviews.** The personal, in-depth interview was used in this study to provide the core of the evidence to be analyzed. The interviews took on a conversational tone rather than representing a structured form of inquiry. They served as an essential source of the case study’s information, particularly because “most case studies are about human affairs” (Yin, 2003, p. 92). For clearly, in this study, the human element is needed to provide first-hand insight regarding the topic specified in the research question and sub-questions.

On the other hand, the interview has weaknesses that I took into account. For example, this method of data collection is subject to criticisms of bias, poor recall, and possible inaccuracy. Concerning bias, Rubin and Rubin (2005) advocated that the researcher exercise discipline in terms of maintaining a neutral stance, explaining that this is essential in generating truthful interviewing that reflects honesty. With this in mind, the information I gained from this method of inquiry was considered most valuable in terms of the interviewees’ perceptions, opinions, suggestions, and insights rather than as factual evidence.

The in-depth interviews were guided by questions set up in the study’s protocol. Use of the interview process to directly learn the relevant perceptions of the professors (in both Ghana and the United States) and non-teaching educators broadened my understanding of what might have gone wrong with the Ghanaian higher education system. It also promoted an understanding of the questions of *what, why,* and *how* regarding relevant aspects of the U.S. model that can inform the establishment of community colleges in Ghana, and in the process, effectively address the transition problem.
In conducting the in-depth interviews, I followed two recommendations of Yin (2003): (a) pursue a consistent line of inquiry, one that corresponds to the case study protocol, and (b) ask friendly non-threatening questions that are open-ended and conversational, in a manner that is unbiased, yet also satisfies the needs of the interview protocol—that is, the purpose of the line of inquiry. The most common forms of in-depth interview are the face-to-face interview and an electronic form of interview, such as by telephone, e-mail, or Skype (a software device that allows individuals to converse with each other by voice and video over the Internet). The in-depth interviews for this study were all face-to-face.

The purpose of the in-depth interview, regardless of format, was to extract detailed evidence related to the issues under scrutiny (Patton, 2002; Yin, 2006). This included issues embedded in the two subunits of analysis into which this case study was divided. Later in the analysis stage, this evidence was sorted into categories and then themes associated with the interview questions and, in turn, the primary research question and sub-questions.

Prior to the interview session, every participant was asked to read and sign an informed consent form. This form described the purpose of the study, the scope of questions to be covered, and information related to the confidentiality of the study, its voluntary nature, and other details that a participant must know to be protected, according to IRB guidelines (see Appendix C). Each interview was tape-recorded, which proved to be a valuable strategy not only during the data collection process but also in the data analysis stage where I could again review the transcripts as needed. According to
Creswell (2007), recording the interview discussions can facilitate the aim of producing findings that are accurate and, in turn, more trustworthy.

Direct observation. The notion that a case study should take place in the natural setting of the case makes possible the opportunity for direct observation as a valuable source of data (Creswell, 2007; Merriam, 1998; Yin, 2009). I engaged in both formal and informal observation to provide evidence that complemented data gathered from other sources. Following the recommendation of Stake (1995) and Yin (2003), I used an observational protocol as a guide so that direct observation activities could be directed toward the inclusion of various types of targets (Merriam, 1998; Yin, 2003), such as those that were physical/environmental, social/interactional, and behavioral. For example, I directly observed those institutional structures that were relevant to the study, both in Ghana and in the United States, in terms of environmental context, physical space, and infrastructure, in addition to interaction and behavioral aspects of the participants. In order to increase the reliability of the observational evidence I gathered, I engaged in more than one single observation, formal or causal, that is, multiple observations, as suggested by Creswell (2007), Patton (2002), and Yin (2003).

Documentation. The review of relevant documents is particularly useful as a means of corroboration with or augmentation to evidence already gathered from other sources to make legitimate points (Merriam, 1998; Patton, 2002; Yin, 2003). Thus, in this study, the main reason for including documentation as a method of data collection was to confirm or increase evidence that I had already obtained from other sources.

Some of the secondary sources that were examined included relevant articles in journals, magazines, and newspapers; textbooks; documents; and manuals/handbooks. No
additional documentation was suggested by the participants or otherwise revealed during the data collection process. A strength of using documentation as a secondary source of information is that it can be considered stable, because it is easily retrievable. Also it can cover a large time period, as well as many events and contexts (Creswell, 2007; Patton, 2002; Yin, 2003). Thus in the present study, the documentation that was examined not only provided background information, but also was useful in supporting or contradicting the insights and other information learned from the participants (Creswell, 2007; Merriam, 1998; Yin, 2003). Nevertheless, I used the documents carefully, because there are also limitations associated with this data collection method. For example, I heeded Yin’s (2009) warning that although documentation tends to be considered exact in terms of supplying names, dates, and other details, it may in fact be inaccurate or biased. In this regard, I did not accept documents as completely trustworthy, but rather as information of interest albeit requiring further investigation (Patton, 2002; Yin, 2003). Moreover, I was careful not to give documentary evidence more weight than the other evidence I collected, particularly the interview material.

**Example of the study’s use of documentation.** In addition to enhancing the study’s reliability, the inclusion of relevant documentation can be valuable beyond its use as a triangulation strategy. Documentation can also serve as a fundamental backdrop for the case study, including a grasp of the key issues therein. Accordingly, in this study, an excellent example of such documentation is Brumbaugh’s (1964) work, *Guidelines for the Establishment of Community Junior Colleges*, which presented necessary assumptions underlying the community college movement. Brumbaugh contended that the following concepts should be understood by researchers, planners, and policy makers—all those,
including researchers such as me, who were considering the U.S. community college model as part of the solution to the Ghanaian higher education crisis:

1. All individuals living in Ghana should be given the flexibility in terms of opportunity and adaptability to seek education to the extent of their capabilities and competence.

2. The community college model must be affordable, reasonable, and effective for students wishing to continue their education beyond senior secondary school, thereby closing the gap that has resulted from many students’ inability to make the transition to a university education.

3. The community college in Ghana must be multipurpose in scope in order to fully realize its function in Ghanaian society.

4. The purpose and programs of the newly established community college must be grounded in the needs of its community.

5. Financial support for the Ghanaian community college must be obtained from multiple sources—the community, the public, and the state.

6. Operation of the community college system should reflect local administrative control to allow for needed flexibility, but it should also correspond to the state pattern of tertiary education and be governed by state agencies.

**Data Analysis**

In qualitative research, data analysis consists of “preparing and organizing the data...for analysis, then reducing the data into themes through a process of coding and condensing the codes, and finally representing the data in figures, tables, or a discussion” (Creswell, 2007, p. 148). This sums up the present study’s general approach to data
analysis. And whereas a familiarity with various tools and manipulation techniques is
helpful in data analysis, I followed both Creswell (2007) and Yin’s (2003) advice that to
begin with, every case study should “strive to have a general analytic strategy of what to
analyze and why” (Yin, 2003, p. 109). Based on this advice, the study’s general analytic
strategy was informed by the study’s primary research question. Attention to the research
question was not only instrumental in shaping the data collection process, but also gave
direction as to my priorities in analyzing the data (Patton, 2002; Yin, 2003). A broad
overview of the general plan I followed is described below:

- Data managing - Create and organize files for data.
- Reading and memoing - Read through text, make margin notes, form initial
codes.
- Describing - Describe the case and its context.
- Classifying - Use categorical aggregation to establish themes or patterns.
- Interpreting - Use direct interpretation; develop naturalistic generalizations.
- Representing, visualizing - Present in-depth picture of the case using
narratives, tables, and figures. (Creswell, 2007, pp. 156-157)

All of these steps were essential to the data analysis process in this study,
however the classification phase was of central importance in this process and therefore
is briefly described as follows: I extracted themes from the data that were related to the
issues and topics. During this activity, I kept in mind that it was crucial to the ideological
underpinnings of the study that the entire data analysis process—and later, a reflection
and interpretation of the data—be guided by postcolonial theory and the critical pedagogy
perspective characterized by Freire’s banking concept. Nevertheless, the exact themes at
this early point in the analysis were dependent on what specifically emerged from the
data. These themes were then sorted so as to pertain to categories relevant to the issues
being explored. Because each interview question was designed to embody a specific
theme, each of these themes reflected the essence of the corresponding interview question. For example for the interview question, “What do you see as the most pressing needs to the Ghanaian higher education system?” the theme that captured its essence was “most pressing needs.” Sub-categories representing issues and areas that were investigated with respect to the study’s two primary subunits (i.e., issues facing Ghanaian higher education system related to the transition problem and applicable aspects of the U.S. community college model) were also created to aid in the discussion of the findings from another perspective in Chapter 5. This major analytical process is referred to in case study literature as “categorical aggregation” (Creswell, 2007, p. 163). To facilitate this process of categorical aggregation, I used the analytical tool of coding.

**Use of Coding**

It has been said that “any researcher who wishes to become proficient at doing qualitative analysis must learn to code well and easily” (Strauss as cited in Saldana, 2009, p. 1). Accordingly, I adopted several complementary coding strategies as a primary means of analyzing the data for this case study, based on Saldana’s (2009) work, *The Coding Manual for Qualitative Researchers*. This work informed my understanding of how to proceed with the process of coding, as follows:

First of all, it was be important to start informal coding as soon as I began to obtain data, rather than waiting until I reached the formal analysis stage. This meant jotting down any preliminary words, phrases, thoughts, and ideas that could be used for codes when I was writing up field notes or transcribing the recorded interviews (Saldana, 2009).
In order to better describe the coding methods I used, it is necessary to define the term, code. Saldana (2009) explained it this way: “A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data” (p. 3). Likening coding to the function of a book title, Saldana went on to say that the code’s function is “to represent and capture a datum’s primary context and essence” (p. 3). Merriam (1998) explained that coding is all about analysis and interpretation of the study’s findings that will reflect the “constructs, concepts, language, models, and theories” (p. 48) that structured the study in the first place. In order to be successful in my coding efforts, I took into consideration Saldana’s (2009) suggestions as to personal attributes of the researcher that should be pursued:

- Be organized;
- Exercise perseverance;
- Be able to deal with ambiguity;
- Exercise flexibility;
- Be creative;
- Be rigorously ethical;
- [Have or make use of] an extensive vocabulary. (pp. 28-29)

Based on Saldana’s (2009) coding manual, I used a two-cycle coding system. Both cycles were necessary, because the coding method I used for the second-cycle built on the first-cycle methods.

**First-cycle coding methods.** In the first of two cycles associated with engaging in the coding process, I embraced the following coding methods: (a) descriptive, (b) structural, (c) emotion, and (d) in vivo coding procedures. I began using the *descriptive coding* method at the start of data collection. These codes were then applied at the beginning of the data analysis in order to make sense of the issue embedded in the larger...
topic under scrutiny—or, for the purposes of this proposed study, the issue embedded in the particular subunit of analysis. Basically, this approach allowed me, as the researcher, to summarize the basic issues or shorten phrases in the early stages of the analysis process as a way of breaking up the data so as to make it more manageable (Patton, 2002; Saldana, 2009).

I utilized structural coding to ensure the data being analyzed was related to the original research question, including its subunits of analysis. In structural coding, a conceptual phrase representing a topic of inquiry was matched to a part of the data that related to a specific interview question (Saldana, 2009; Yin, 2009). Thus, the structural coding method enabled me to stay focused on the particular subunits of analysis and subsequent issues of the case.

In regard to emotion coding, I developed codes, beginning in the data collection stage, that labeled the recalled emotions associated with the experiences described by the participants. According to Saldana (2009), because emotions are a central part of human experience, it is essential that they be integrated into qualitative research that is related to insights of human understanding and their subsequent role in the process of data analysis. Applicable to this case study, the use of emotion coding helped evoke for me a feeling (Bickman & Rog, 2008; Yin, 2009) about the feasibility and appropriateness of using the U.S. community college model as an agent of change in addressing the Ghanaian higher education crisis, particularly in regard to the transition problem, and why.

In vivo coding refers to the coding of short words or phrases extracted from the actual wording of the participants as it appears in the data records. I used this method of coding mainly for triangulation purposes, based on the list of first-round, descriptive
codes related to specific quotes from the participants (Saldana, 2009; Yin, 2009). In the end, according to Saldana (2009), this coding method can be said to honor the participants’ voices.

**Second-cycle coding.** In the second cycle of coding, I more concisely organized and analyzed the data (Saldana, 2009). After the first-cycle coding process is completed, Saldana (2009) advocated engaging in one or more of the second-cycle coding methods, such as (a) focused, (b) axial, (c) theoretical, (d) elaborative, and (e) longitudinal coding. Of these, I chose the focused coding method to aid in analysis of the data.

With the use of *focused coding*, I searched for the most relevant codes that emerged from the use of first-cycle coding methods, which is a major goal of this method of coding. Focused coding also enabled me to develop broad categories based on similarities of a thematic or conceptual nature. Overall, this coding method facilitated the organizing, grouping, and regrouping of all similarly coded data into categories, because according to Bernard (2006) and Grbick (2007), such data share characteristics that suggest a possible relevant pattern. This type of second-cycle coding supported my goal for using coding in data analysis, which was to search for patterns and then ideas that helped provide an understanding as to why those patterns

**Final Report**

After completing an embedded analysis of the case in terms of its subunits, facilitated by first- and second-cycle coding methods, the final stage of this instrumental case study was preparation of the final report. Lincoln and Guba characterized the core of this final report—its conclusions—as “lessons learned” (Creswell, 2007, p. 154). More specifically, in this report, I first described and then provide an interpretation, in narrative
form, of all relevant evidence related to the salient issues and aspects embedded in the study’s two subunits of analysis. Accordingly, salient themes and patterns associated with key applicable aspects of the U.S. community college model as well as embedded issues related to access and inequities in educational opportunity were described and discussed in an interpretive context. I then synthesized these analyzed and interpreted findings and linked them to the main unit of analysis (see Chapter 5). This allowed me to arrive at conclusions related to the study’s research question regarding in what ways the U.S. community college model can be used as an appropriate and effective agent of change for the Ghanaian higher education system, with a special focus on its transition problem.

**Trustworthiness**

In the process of ensuring trustworthiness of the research, I strongly relied on triangulation among different data sources and writings, as discussed earlier, in addition to providing detailed descriptions that were relevant to the purpose of the study. Another major strategy I used to enhance trustworthiness was member checking. I engaged in member checking during the data gathering process, at which time I asked participants frequently, in a few words or short phrases (reflecting the descriptive coding method), if I had captured their views or the points they were making. This proved a good way for me to clarify any of the participants’ perceptions about which I was unsure. Lincoln and Guba viewed member checking as “the most critical technique for establishing credibility” (as cited in Creswell, 2007, p. 208). Moreover, the fact that the participants were allowed to play a direct role in the research findings has been highly advocated by research scholars (Merriam, 1998; Stake, 1995).
Limitations and Strengths

Before discussing the methodological limitations of this research, it is essential to acknowledge some ideological strengths and weaknesses related to what this research study can do for Ghana as well as the other nations of Africa. On the one hand, this study can open up the discourse surrounding questioning related to the higher education crisis in Africa as a whole, and Ghana in particular. On the other hand, transferability of the U.S. community college model to Ghana and possibly Africa in general is somewhat limited in terms of anticipated obstacles. Even the possibility of replicating the U.S. model in any of the nations of Africa is somewhat unlikely unless major hindrances, such as cultural differences, language barriers (both French and English), and unique needs and values manifested by individual African countries—including Ghana—are effectively addressed. Nevertheless, it was helpful that as the principal researcher, I am Ghanaian. This unquestionably allowed for greater cultural sensitivity and eased the flow of discussion in the in-depth interviews.

Difficulty with the implementation of this proposed alternative solution is deep-rooted. Historically, African countries have been dealing with various education models from early colonial times to the present postcolonial era. This is the case in Ghana, beginning with the classical British Oxbridge model, which has subsequently seen several alterations that have yielded little or no progress. In light of this, adoption of a modified version of the U.S. model is also not going to be easy to accomplish, in practice. And so, findings from this present case study may be limited in their applicability regarding transfer of the U.S. model to Ghana, thereby replacing the Oxbridge model. In this respect, of central importance to the usefulness of this study is its ability to explore the
pros and cons regarding the old, British-type model versus the new one that is up for consideration in this case study.

Moreover, the status of generalizability in qualitative research in general and, more specifically, in the findings of this proposed case study, is questionable (Creswell, 2007; Patton, 2002). As a constructivist, I do not believe in generalization as a goal for conducting research. However, it can serve as a basis for serious consideration of the transfer of a carefully conceived version of the U.S. community college model to Ghana. Optimistically, such transferability can reflect best practices within the limitations inherent in integrating Ghanaian culture, norms, values, and beliefs, in an effort to use the U.S. model as an alternative model in Ghana’s tertiary education system and as a specific solution to its transition problem.

An application of the study’s findings, based directly on data gathered from the in-depth interviews, direct observation, and documentation, has its limitations in spite of the protocols that have been put in place. For example, these data collection methods can compromise the trustworthiness of the findings due to inherent weaknesses, such as the researcher’s biases, preconceptions, and the way he or she constructs meanings of reality, as discussed earlier.

On the other hand, it was my aim to make the research process as systematic, explicit, and transparent as possible, especially in regard to the chain of evidence I established. In this way, “the data collected reflect a concern for construct validity and for reliability” (Yin, 2003, p. 106). Such efforts will also contribute to future efforts to replicate this study in another setting. Providing multiple opportunities to triangulate information across various forms of data collection makes a strong case for credibility, as
mentioned above, yet even this strategy can have its own limitations (Lincoln & Guba as referred to in Creswell, 2007; Yin, 2003).

As a social constructivist, my understanding of seeking and finding answers and solutions to the problems in the world we live in is extremely challenging. But my research goal was simply to rely as much as possible on the participants’ views on the issues of interest, as mentioned earlier. In short, applying best practices to construct the meaning of a situation, a meaning typically forged with discussions or interactions with others, poses difficulty in undertaking case study research in that it is full of limitations and surprises. Thus, I attempted to keep an open mind throughout the entire research process, to the greatest extent possible, and to prevent all biased information that might jeopardize the case study. The goal of maintaining awareness of the original purpose of the research was my main focus in finding solutions and answers that addressed the issues faced by Ghana’s higher education system. As the principle researcher, I disciplined myself to avoid changing directions easily, because this would have been the worst way of addressing the research question at stake. In effect, I allowed the research to lead me to the findings but not the other way around, thereby becoming more trusting of the actual research process.

Conclusion

Looking at this community college solution within Ghana’s higher education system represents a blend of the old versus advocating for modernity. The process of designing a qualitative study that explores a case of this nature can be likened to “an intricate fabric composed of minute threads, different textures, many colors and various blends of materials” (Creswell, 2007, p. 35 & Patton, 2002). To again use this metaphor,
finding a common ground in the domain of education in Ghana between the old and the new (modernity) can be likened to drawing a line common to the characteristics of the overall fabric before exploring the different threads, textures, and blends of the various materials therein. The lesson to be drawn from this was to focus initially on common characteristics—the patterns—before exploring the uniqueness of the phenomenon as a whole. This meant exploring the complex case from both an intrinsic perspective and a holistic one.

With the case study methodology I had designed in hand, I developed a model of best practices (i.e., arrived at conclusions in the final report) associated with adapting and establishing the U.S. community college model in Ghana as an effective and appropriate solution to Ghana’s higher education transition problem. However, it was essential that my arriving at such conclusions be not only (a) based on the carefully constructed chain of evidence, which accurately reflected the voices of the participants and was triangulated with other sources of data, but also (b) linked to the research question. According to my case study plan, I began with the exploration and description of the issues embedded in the phenomenon under scrutiny, focusing primarily on an analysis and interpretation of the themes that emerged. An interpretative synthesis of the findings related to these subunits subsequently informed the study’s main research questions.

The design of this case study is unique. It is a single albeit complex, qualitative case study that supports an exploratory as well as instrument approach that reflects its intent to utilize the findings to inform the study’s question—and in turn, policy makers—as to how the U.S. community college model can help serve as an agent of change in addressing Ghana’s higher education crisis. To help answer these questions, the case
study was divided into two primary subunits: one related to issues impacting the Ghanaian higher education system and its transition problem, the other related to applicable aspects of the U.S. community college model that can make a difference. In the final analysis, the overall design may be considered holistic, yet the essential division of the case into subunits for exploratory purposes highlights the importance of its representation as an embedded design.

In sum, the collection of thick, rich, descriptive data and the use of first- and second-cycle coding methods for data analysis, combined with the strategies of triangulation, and member checking, helped ensure that I had created the opportunities for improving the trustworthiness and credibility of the findings in my conclusion. These strategies were utilized in addition to the beneficial aspects of collaboration and cooperation enjoyed from the researcher-participant relationship.
CHAPTER 4. FINDINGS

In support of the study’s primary research question, *How can the U.S. community college model be used as an agent of change—an alternative option in addressing the present Ghanaian higher education crisis*, the findings have been divided into two central themes. These include (a) major issues facing Ghanaian higher education and (b) the community college model as a solution. Subsumed under these two themes are sub-themes that emerged from the data that reflect the responses of three distinct groups of Ghanaian educators who were interviewed for this study. These groups include (a) five Ghanaian professors and lecturers teaching in community colleges in the United States, (b) five Ghanaian professors and lecturers teaching in a university setting in Ghana, and (c) two Ghanaian educational consultants. The participants were all interviewed one-on-one, guided by interview protocols developed by the researcher (see Appendices E and F).

The five Ghanaian professors and lecturers teaching in community colleges in the United States all have an academic background in the Ghanaian higher education system, receiving at least their first degree from a Ghanaian university. Each of these participants was asked 10 questions (see Appendix E for interview guide). For purposes of confidentiality, the participants in this data set (Group 1) are referred to below as (a) Daniel of Tennessee, (b) Dr. Francis of Columbia, (c) Dr. Mark of Tennessee, (d) Kwaku of Tennessee, and (e) Dr. Smart of Ohio.
The five Ghanaian professors and lecturers who currently teach in the Ghanaian higher education system (Group 2) all have an educational background in either Canada or the United States, in addition to their studies in higher education in Ghana. Each of these participants was asked 11 questions (see Appendix F for interview guide), basically comparable to those asked of the Ghanaian educators teaching in community colleges in the United States. For purposes of confidentiality, the participants in this data set are referred to below as (a) Dr. Mohammed, (b) Dr. Legon 1, (c) Dr. Legon 2, (d) Dr. Legon 3, and (f) Dr. Leon 4. Not all participants responded to every question because their responses overlapped across themes.

In order to obtain a third perspective—outside the teaching environment but still within the domain of education—two educational consultants (Group 3) were interviewed. Both educators serve in the Ghanaian Ministry of Education, and one is also an outside educational consultant. The same 11 questions asked of the Ghanaian professors in Group 2 were used to guide the interviews with these two participants, Dr. A and Dr. C (see Appendix F).

**Major Issues Impacting Ghanaian Higher Education**

Fundamental to considering any effective higher education reforms for Ghana is the examination of major issues perceived by the Ghanaian educators in this study as instrumental in contributing to the current crisis in Ghanaian higher education (Theme 1). Reflecting the participants’ views, the following critical issues emerged as sub-themes: (a) infrastructure, (b) access and the transition problem, (c) teaching and learning, and (d) student preparation for employment and human capital production. Prior to presenting these four sub-themes based on the participants’ perspectives and actual words, however,
it is important to provide the context for these sub-themes by way of a brief description of Ghana’s current education system through the eyes of the participants.

**Description of the Ghanaian Education System**

Serving as a backdrop for this first theme related to major issues impacting Ghana’s higher education system and in turn the transition problem, participants provided a general description of Ghana’s current higher education system. For example, Dr. Mohammed began with a structural overview of Ghana’s education system, before talking later about the issues negatively impacting higher education, including the transition problem. He described the system as consisting of 6 years of elementary school, 3 years of middle school, and 3 years of senior secondary school (SSS, also referred by participants as SHS—senior high school). He pointed out that high school graduates then select different paths in tertiary education, such as the university (4 years), a polytechnic school (1 to 3 years), teacher/health training colleges, and so on. He prefaced this formal description with the following remarks:

> The GHES [Ghanaian higher education system] is designed to be a vertically structured system with critical transition and exit or terminal points to enable it to serve different groups of students with different career goals. The overarching goal is to serve the national objective of a highly educated and skilled workforce.

Similarly describing higher education in Ghana from a more formal, structural perspective, Dr. Legon 4 added that Ghana’s higher education system is “a structured, semi-controlled system with direct instructions from the government of the day,” referencing, in particular, the public universities. He pointed out that the system is “administered through the NCTE [National Council on Tertiary Education] and the National Accreditation Board.”
However, when asked to describe the current state of Ghanaian higher education, the initial response from both Dr. Francis of Columbia and Daniel of Tennessee was that the Ghanaian system needs a complete overhaul. The most pressing need of Ghana’s higher education system was summed up by another participant in one word, “Reform.”

In describing today’s Ghanaian higher education system from a more ideological standpoint, one of the educational consultants portrayed it as “a blend of British and American systems” (Dr. A). He explained that because of the British colonization of Ghana, its higher education system originally followed the British model. Subsequently, “with the advent of most America-trained lecturers, the U.S. model has crept into it.” Overall, regardless of the various descriptive standpoints, it was generally perceived that the entire system needed restructuring.

Sub-Themes Reflecting Major Issues

Of the study’s two overarching themes, the first theme, major issues impacting Ghanaian higher education, was supported in the data by four salient sub-themes. These include (a) infrastructure, (b) access and the transition problem, (c) teaching and learning, and (d) student preparedness for employment and human capital production.

Infrastructure. More infrastructure was emphasized by participants as one of the most pressing needs of Ghanaian higher education. Basic areas of infrastructure underscored by participants are as follows:

- Policy and procedures
- Governmental involvement
- Financing of education
- Resources
• Overcrowded classrooms

**Policy and procedures.** In regard to areas related to infrastructure, the participants brought up various aspects of policy and procedures that plagued the educational system. Kwaku of Tennessee recommended that to begin with, Ghana needs to structure its educational system in a way that corresponds to its goals, as well as the characteristics of its students, such as their ages, and so forth. One practical suggestion was to build into the system a strong daycare component.

Characteristic of the challenges experienced by all the developing countries, Dr. Legon 2 emphasized “improper planning and lack of commitment to implement reform.” One of the points Dr. Legon 2 made regarding the need for more adequate infrastructure included the need for “better conditions of service for teachers.” The need for better monitoring and management of the educational system was also stressed, as illustrated in Dr. Legon 4’s remark: “The proliferation of university colleges needs to be controlled and monitored for qualified candidates to enroll in higher education.” Further, he decried the “poor monitoring and supervision by school management,” which he perceived as clearly affecting the students’ quality of education. Overall, Dr. Mohammed was in line with other participants’ sentiments when he voiced the fundamental need for “stable and autonomous policies.”

**Governmental involvement.** Governmental involvement was perceived as essential to the success of education in Ghana; however participant responses regarding such involvement in the infrastructure of education were seemingly ambivalent. On the one hand, participants strongly emphasized that there was insufficient and inadequate
government involvement in terms of infrastructure; on the other hand, it was felt there should be less government involvement.

In support of the need for more government involvement, Dr. Mohammed named “insufficient and inconsistent official government support” as one of five factors he believed was impacting higher education’s inadequate infrastructure—a factor also closely associated with Ghana’s transition problem. He gave the example that “students’ performance can also be affected by frequent disruptions as a result of lack of adequate funding for subventions [government financial aid to education] and teacher salaries.” It was explained that currently in Ghana, the government is grossly in arrears in payments to teachers and funding to help run and manage the public universities. Clearly, this and other participants’ criticisms regarding infrastructure were closely tied to government’s inadequate financial support of education (discussed separately later on).

The need for less government involvement was also seen as essential for some participants. Dr. Legon 3 explained that a central issue that should be addressed is that “the system is heavily politicized.” He contended that until this situation is confronted in a holistic manner, “our educational system cannot serve its purpose.” Having described earlier Ghana’s higher education system as “a semi-controlled system with direct instructions from the government of the day,” Dr. Legon 4 contended later that there is a critical need for independence from government control, but added that there should be very good coordination.

Based on the various participants’ responses, the apparent ambivalence regarding wanting more versus less government involvement may be explained as follows: More involvement may primarily have been related to nuts and bolts, material issues, such as
better and increased resources and facilities, whereas the call for less involvement may have been related more to control of policies and procedures.

_Please note:_ There is a missing line of text after the sentence that begins with "Government efforts to address the transition problem." This line is not visible in the image.

*Government efforts to address the transition problem.* Several of the participants described government efforts to address poor infrastructure, and indirectly, the transition problem—the lack of access and inequity in educational opportunity, resulting in an enormous pool of discontinued students. Dr. Mohammed acknowledged that there have been many ongoing efforts to address infrastructure and the transition problem. Whereas he provided the following description of such efforts in terms of current accomplishments and goals, in some cases, the distinction between these accomplishments and goals was not clear. Efforts included,

- Improving curriculum delivery: better qualified teachers, periodic review of teaching and contact hours, appropriate books, study material;
- Creating more spaces: Expanding existing programs and creating new universities, government and private; empowering the youth to develop and manage their careers;
- Providing initiatives for youth employment: NYEP [National Youth Employment Programme, now known as the Ghana Youth Employment Development Agency, GYEDA], LESDEP [Local Enterprise and Skills Development Program], self-employment [a main solution to the graduate unemployment problem]

From a political standpoint, Dr. Legon 1 pointed out that various political parties have included some ideas in their manifestos regarding how to deal with inadequate infrastructure and the resultant transition/discontinued-student problem. Also, he indicated that there have been suggestions, based on various commission reports, about making improvements in “vocational and technical intermediary education to train dropouts in skills in farming, and so on.” However, Dr. Legon 2 did not believe the
situation has been taken seriously: “Government seems not too committed to tackling educational challenges holistically.”

Whereas Dr. Legon 3 voiced his uncertainty as to any current plans to address the transition problem, and in turn, the disproportionate number of discontinued students, Dr. Legon 4 was a little more optimistic, but qualified his answer: “Somewhat. Government is making efforts to increase infrastructure and motivate teachers. But as to how to make students make the necessary transition is another matter.”

**Financing of education.** Closely related to the need for better government support to help “fix” Ghana’s inadequate educational infrastructure, as mentioned above, is the issue of too little financial support for education. This interconnectedness between infrastructure and financing was voiced repeatedly by participants. Thus, along with the importance of improved infrastructure as a central issue, participants viewed the need for better financing of education as paramount. For example, Dr. Legon 1 singled out the system’s most pressing need as “financing of education to strengthen existing infrastructure.” There was a consensus among participants that substantial funding was needed to provide the “critical infrastructure to facilitate teaching, learning, and research” (Dr. C). In fact, the need for increased financing of education was one of the three primary issues that the educational consultants emphasized in their interviews (the other two issues being curriculum/pedagogy and infrastructure). Linking financial support to the transition problem, Dr. Smart explained that more financial resources was a basic ingredient in addressing such issues as lack of access to all and inequality of opportunity that were crippling Ghana’s education system.
For many participants, increased financing of education seemed to be the sole responsibility of government. However, some participants also advocated for the financial involvement of the business community in partnership with government support. In the words of Dr. Francis, “More financial support from the government and private business to support for higher education [was needed].”

**Resources.** Resources were viewed by participants as fundamental to an effective education system. Dr. Mohammed asserted that “inadequate or poor quality textbooks and other prescribed resource material” was a factor that not only affected student preparedness for a tertiary education but also compounded the issue of poor curriculum delivery (an issue discussed later). Dr. Legon 1 pointed out that “rural schools lack access to recommended textbooks,” putting rural students at a disadvantage in seeking a higher education.

Viewing Ghana’s higher education problems as directly related to infrastructure, Kwaku of Tennessee decried the fact that “technology is missing in Ghana.” In addition to technology, Dr. Mark emphasized online courses in addition to Ghana’s fundamental need for textbooks, indicating that for him, the bottom line is investing in education and acquiring the resources, such as technology, that can help improve Ghana’s education system.

In discussions regarding the need for improved and increased facilities and equipment, technology was again mentioned as one of the areas that should be focused on. Dr. Mohammed pointed to the need for classrooms, laboratories, and computers, also mentioning the need for “support systems (internal and external): administrators, career counseling, and support.” Another participant mentioned the need for “classroom blocks,
hostels…and laboratory facilities, including strong intra- and interactive networks” (Dr. C).

**Overcrowded classrooms.** One of the reform issues highlighted by Dr. Legon targeted the downsizing of classrooms. He contended that the large classes “impede quality assessment of students and faculty.” Dr. C posited that the popularity and emphasis on Ghana’s having an educated populace have resulted in the greatly increased class size in tertiary education, which has discouraged the use of an interactive format. Dr. Legon decried the disproportionately large student-to-lecturer ratio at the tertiary level that has been hindering teaching effectiveness.

**Other issues of infrastructure.** It appeared from their lack of attention to the issue of corruption that the participants recognized it as somewhat of a given, although it was briefly mentioned by a few participants. For example, when Dr. C was talking about problems with SSS education that impacted the access problem, he included the criticism that “placement in SHSs is very competitive and fraught with corruption.” And whereas Dr. Mark alluded to the common belief that corruption was an obstacle in the higher education system, he recommended that this be ignored. Rather, he asserted that the focus of educators should be on the major issue of too many students for too few jobs.

Several participants brought up the issue of brain drain, a phenomenon Ghana and many other developing countries were experiencing, wherein many of Ghana’s most talented students and graduates tend to leave their country in search of better educational or job opportunities elsewhere. In this respect, Dr. Francis urged “reduc[ing] the current unacceptable levels of brain drain in the country.” Another dimension of this problem was mentioned by one participant: the situation where Ghanaians educated in foreign
countries return home to take the paucity of job opportunities that are available. This again underlined a major problem facing Ghana as a nation: too many students for too few jobs.

**Access and the transition problem.** A second salient sub-theme that emerged from the participants’ input regarding major issues facing Ghanaian higher education was access to higher education and the subsequent transition problem. The participants’ responses supporting this sub-theme targeted such considerations as (a) nature of the transition problem, (b) perspectives on access to all and inequities in educational opportunity, (c) factors impacting access to all and equality in opportunity, and (d) problems with SSS education that impact students’ transition capabilities.

**Nature of the transition problem.** In the context of discussing access to all and equality in educational opportunity, Dr. Francis summarized specific factors that could be considered responsible for the transition problem: (a) inadequate preparation of the SSS students, (b) too few openings for students entering higher education versus the unwieldy number of students competing for those openings—a demand/supply gap issue, and (c) “lack of multiple opportunities to gain admission, that is, if a student misses his or her chance [to gain admission], he or she has to wait for a whole year to try again.”

Along with Dr. Mark and others, Daniel of Tennessee believed it would be helpful if alternatives were available to SSS students who were not able to pass the entrance examination to a public university. In his words,

[There is a need to provide] many pathways of giving students the chance of pursuing their own education…other means of students entering the Ghanaian university education system apart from entrance examination.
In this regard, he suggested that “placements should be encouraged.” Dr. Smart made the observation that there are discontinued students in every society; however, the question that must be asked is, “What are the mechanisms put in place to educate those students?”

**Perspectives on access to all and equality in educational opportunity.**

Participants talked about not only the importance of access to all and equality in educational opportunity, the need to achieve these goals, but also the rationale as to why these goals had not been realized in Ghanaian higher education. Meant to serve as a backdrop for the research study, the first interview question participants were asked was to describe Ghana’s higher education system. As illustrated earlier, some participants provided a formal, structural description; however, Dr. Legon 1 provided a more critical view that implied the existence of the transition problem, and with it, the issues of access to all and equality in educational opportunity. In his words, “[Ghana’s higher education] offers opportunities for only a few to access that level of education.” Simplistically, this assessment gets at the core of the transition problem—lack of access to all and inequities in educational opportunity. As the interview process progressed, it was found that there was consensus among the participants that these goals must be achieved—and the obstacles to attaining them resolved. As expected, the participants’ responses varied as to how to achieve this and what needed to be changed.

Dr. Smart believed strongly in equal access for Ghanaians. Equating access for all with an educated populace, he provided this rationale:

An educated society is a successful society. I truly believe education is the right course. An educated people can make their own decisions, and that is fair in every society. Moreover, educated people can demand for their rights, get involved in politics, and become leaders or not, so there should be equal access to all Ghanaians.
Daniel of Tennessee looked at the goals of access to all and equality in educational opportunity from an interesting perspective that focused more on everyone’s right to receive an education in higher learning, but one tailored to the abilities of the individual. This would then dictate which pathway to higher education should be taken. He eloquently conveyed this point as follows:

Ghanaian society should be educated with the understanding that we are all not equal, but each person is important, so every individual deserved education with hopes and aspirations of creating numerous pathways for all.

He added that Ghanaian students should have the ability to transfer to any university in Ghana, although he did not elaborate on a strategy. Dr. Mark emphasized the need for making “education more accessible to any Ghanaian who wanted to learn.”

When asked to comment on the issues of access and inequality of opportunity in higher education, Kwaku from Tennessee responded that the underlying component here is “choices”: From this standpoint, access is dependent on more schools and major departments, with more choices for the students to make. He also added that placement tests should be encouraged—a recommendation also voiced by Daniel of Tennessee. For Dr. Mark, the issues of access for all and equality in educational opportunities were viewed from an entirely different point of view: “We are talking more about merits”; however, he did not elaborate.

Factors impacting access to all and equality in opportunity. Participants had definite views on specifically what factors negatively affected the achievement of access and equal opportunity. For example, in addition to components regarding quality of the curriculum (discussed later), Dr. C. itemized five factors that he perceived as interfering
with access to all and equality in opportunity, and subsequently, students’ progress in transitioning to tertiary education:

1. Higher school fees compared to income of the average Ghanaian;
2. Inability of teachers to thoroughly complete the syllabus;
3. Too many deprived schools in rural areas;
4. Lack of proper supervision by GES [the General Education System];
5. High drop outs due to teenage pregnancy.

From another perspective, Dr. Mohammed perceived a different set of needs that reflected issues contributing to the transition problem:

- Adequate resources: infrastructure (classrooms, laboratories, computers)
- Teachers and curricula and learning material
- Support systems (internal and external): administrators, career counseling, and support.
- Stable and autonomous policies

Dr. C pointed to the fact that too few people have the opportunity to get a tertiary education as a consequence of the curriculum being less interactive and there being too much emphasis on examinations (discussed later).

In the process of their looking at particular factors that hindered students’ progress related to access and opportunity, participants also perceived somewhat broader factors as directly and indirectly impacting the transition problem. Salient factors mentioned include (a) the admissions policy, (b) the demand-supply gap, (c) the limited location of educational facilities, (d) financial constraints, and (e) problems with SSS education that impact students’ transition capabilities. Ever present among these factors is the underlying theme of the need for more government funding for education. It should be noted that some of these factors (presented below) overlap with major issues and contributing factors discussed earlier as sub-themes in relation to Ghana’s higher education crisis.
Admissions policy. Within the scope of a discussion about the nature of the transition problem, participants brought up the subject of admission policies, with some participants placing top priority on the admissions process as a pressing need in the Ghanaian higher education system that required reform. Supporting this view, Dr. Legon 4 gave the example that there are outstanding students who may not meet all of the requirements necessary to be admitted to the university. He contended that contrary to the present situation, a student with 7 As and an E in social studies should be able to be admitted to a higher education program where he or she can succeed. Furthermore, he decried the fact that exam results were often delayed. Addressing the problem of students’ only being able to sit for the entrance exam once each year, Dr. Francis suggested that “additional admission opportunities, such as three a year instead of only one opportunity a year” be offered.

A related factor retarding the students’ progress toward their transition efforts was explained by Dr. Legon 4 as follows: “Since all students write the same examination, slow students and the less endowed find it difficult to cope. This has resulted in “coaching” and extra classes in all the schools.” In the end, it was participants’ view that “many qualified applicants do not get admission” (Dr. Legon1).

Dr. Mark suggested the introduction of a policy similar to the U.S. concept of affirmative action, which he indicated was proposed in Ghana over 10 years ago by sociologist, Professor Adan. Nevertheless he concluded that in the final analysis, it was essential to encourage more investment in education as a prerequisite for ameliorating the transition problem as well as other problems within the Ghanaian system.
Demand/supply gap. Many participants also saw a connection between the critical demand-supply gap and the issues of lack of access and inequality in educational opportunity. Dr. Francis talked about the fact that there are not enough institutions of higher education for the large number of students who want to enroll, giving the example of there being only three major universities serving more than 1,000 high schools. “As a result, a significantly large population of Ghanaian students drop out of school, not because of academic ability but lack of access to higher education.” Dr. Mohammed summarized the demand-supply gap situation in this way: “It is a reality that infrastructural development greatly lags population growth and demand for resources.”

Geographic location. The geographic location of educational facilities was clearly perceived as a critical factor affecting the achievement of access to all and equality in educational opportunity in terms of students’ capabilities for entering a tertiary institution. In particular, it was noted that students from rural areas are being negatively impacted as a result of this logistical factor. According to Dr. Mohammed,

It is well-known that schools in or near the rich urban centers are able to produce students with better grades for the transition from SHS to tertiary. For some students, family, social, and other commitments do not allow them to move to a tertiary institution if it involves significant distance.

Similarly, Dr. Smart pointed to geographical location as a major reason why Ghanaian higher education does not provide equal access:

Presently, most of the good schools are located at the coastal areas, and that is wrong, as it denies some folks equal access. Unfortunately, most Ghanaians live in the rural areas, so it means our educational system denies the majority of Ghanaians an access to our educational system. In short, that can be translated as something wrong with our education system.
From the same perspective, Dr. Mark believed that children from rural areas should be given equal opportunity to access higher education, along with the more privileged students from the big cities. He observed, as did other participants, that at present, there is significant inequality in educational opportunity between the rural and urban students in terms of access.

Financial constraints. Several participants pointed to the financial burden experienced by many SSS students and their families as a significant hindrance to students’ ability to make the transition to higher education. To explain this point, Dr. Mohammed pointed out that even though the SSS tuition is free, there are many costs in the form of fees, room and board, and more, so that “a large number of otherwise qualified students are unable or unwilling to make the transition of the tertiary level purely on financial grounds.” He stressed the fact that “sometimes even with good grades, a candidate is unable to transition to a tertiary institution because of lack of funds and support.” Moreover, Dr. Legon 2 also voiced concern that the financial burden placed on students and their families due to extensive high school fees was a factor that retarded students’ transition efforts.

Problems with SSS education impacting students’ transition capabilities. Within the scope of a discussion about the nature of the transition problem, participants spoke specifically to the problems with SSS education that they perceived were impacting students’ transition capabilities. Salient problems that were seen as hindering student progress at the high school level related mainly to (a) poor infrastructure, (b) curriculum content—emphasis and quality, (c) pedagogical issues, (d) limited geographical location of facilities, (e) financial constraints, (f) inadequate resources, and (g) lack of government
support. Of these, poor infrastructure and inadequate resources are discussed in this section. The factors of financial constraints, geographical location, and lack of government support (governmental involvement) were discussed earlier, and those regarding curriculum content and pedagogy are presented in the following section, teaching and learning. Other issues with SSS education that were raised by participants, but not elaborated on, included the lack of supervision and the social problem of teen pregnancy.

*Infrastructure.* Targeting the policy-and-procedures element of SSS infrastructure, Dr. C indicated that placements in SSSs were very competitive, as well as stressful. Participants talked about inadequate infrastructure at the high school level from various standpoints. The nature of this issue of poor infrastructure and its repercussions for students in terms of preparedness are explained by Dr. Mohammed as follows:

> There is such a wide disparity between different high schools in terms of the state and readiness of classrooms, laboratories for learning that some students simply are unable to prepare adequately for the uniformly administered exit exams (WASCCE/SHE). It has been established that many of the nation’s schools still faced the combined challenges of deteriorating conditions, out of date design, and overcrowding which were detrimental to effective academic work.

*Inadequate resources.* Referring earlier to poor infrastructure as one of the major issues affecting Ghanaian higher education, participants had talked earlier about the lack of resources as a critical component of infrastructure. However this topic was brought up again when they discussed their views regarding salient problems with SSS education that hindered students’ progress related to access and opportunity toward entering a tertiary institution. For example, Dr. Legon 1 stated, “rural schools lack access to recommended textbooks.” And Dr. Mohammed spoke more generally about “inadequate
or poor quality textbooks and other prescribed resource material.” Such concerns were viewed as affecting the quality of the students’ grades and, in turn, their ability to transition to an institution of higher learning.

**Teaching and learning.** Supporting the first theme regarding major issues, this third sub-theme—teaching and learning—emerged from the data as one of the most important aspects of Ghana’s higher education crisis. For example, in discussing specific aspects of the transition problem that should receive attention, Dr. Mohammed named “teachers and curricula and learning material.” The two main elements of this sub-theme that participants emphasized as in need of reform were (a) curriculum content, including its emphasis and quality; and (b) pedagogy in terms of curriculum delivery as well as teachers’ service conditions and treatment.

**Curriculum content.** Daniel of Tennessee observed, along with other participants, that a critical way to address the transition problem is to make sure that SSS students, especially those in their final year, are well prepared for seeking admission to an institution of higher learning, which at present, is not the case. Curriculum content was viewed as a fundamental problem regarding student unpreparedness. Participants’ criticisms were voiced regarding (a) the wrong emphasis of curriculum content, (b) the poor quality and low standards of the curriculum, and (c) the students’ resultant unpreparedness in taking the exam for entering a tertiary institution.

**Emphasis.** Regarding the emphasis of the curriculum, Dr. Smart was critical of the Ghanaian requirement of being successful in the subjects of English and mathematics as the determining factor for whether students transition from senior secondary school to higher education. In his words,
The Ghanaian understanding of successful students...[is that] if you don’t pass English subject then you’re completely failure. Making English subject as the major entrance examination to the university is a disaster and a wrong approach in our educational system.

In regard to student preparedness for tertiary level studies, Dr. A also criticized the emphasis of SSS curriculum content:

The combination of courses at SHS is skewed towards some areas, and students hence lack broader knowledge in auxiliary courses. Not all professors have time to elucidate such knowledge and assume the students should know or know and move on with the lectures regardless.

Considering the emphasis of curriculum content from an ideological standpoint, participants believed the current system, as manifested in its curriculum, was less practical, with too much emphasis on theory. One participant attributed this emphasis on theory versus practicality “to low industrialization” (Dr. A). This theoretical emphasis of the curriculum proved to be an important issue for the participants, who viewed it as having many economic ramifications, particularly regarding lack of preparedness of graduates for the needs of the marketplace. Dr. Smart gave the example of a woman he had met at the University of Ghana 10 years ago who was studying computer science. He was surprised to hear that her learning and training was totally theoretical in nature—that is, she was given no hands-on experience with the computer. In contrast to this purely theoretical approach to learning, Dr. Smart commented, “We learn by doing things, such as touching and feeling, so we can do things in the more practical way.” As one aspect of this theoretical emphasis, Dr. Legon 4 added that students “are not trained to undertake project work.”

*Curriculum quality and standards.* Some participants attributed the problematic transition situation, in large part, to the substandard syllabus that is now being used
throughout the country. They believed that the standard should be higher. Dr. Legon contended that the transition problem is linked to the “substandard syllabus that does not meet international standards.” Supporting this assessment, Dr. A remarked,

The fundamentals of education are good grounding in mathematics and English language. The levels of SHS syllabus for these major courses are below the requirements for university studies.

More specifically, Dr. A pointed out that “[this syllabus] is below the former Ordinary and Advanced General Certificate of Education (GCE) syllabi.” He explained the consequences of this situation as follows:

However, the universities and polytechnic models are based on the Ordinary and Advanced levels of the GCE syllabi and hence, poses a great challenge when they [sic] enter the higher education institutions. All the Ghanaian senior high school education syllabi must be reviewed, revised and redrawn to address such problems and inadequacies.

Dr. C. also brought up the issue of low standards that now exists in the SSSs, especially in mathematics. He added that this issue is compounded by the problem that many of the teachers are unmotivated.

Adding to the criticism of the syllabus as substandard, Dr. Legon pointed out that “teachers are unable to complete the syllabus” that was planned for a particular class—a problem perceived by another participant as attributed to the short duration of the high school program. (This problem was linked to the sub-theme of governmental involvement in terms of political indecision—the government’s inability to maintain a stable policy as to whether the high school program should be 3 or 4 years in length.)

Continuing on the topic of curriculum content in the context of student preparedness, Daniel recommended giving special care and attention to the weaker students, whereas Dr. Mark of Tennessee brought up the issue of whether or not to
provide remedial courses to address the deficiencies of students who are not able to pass the entrance exams to higher education. He indirectly supported this strategy with the comment, “Remember, taking remedial class to remove deficiencies is not all bad.”

**Pedagogy.** Although Dr. Mohammed initially named curriculum as a factor impacting student preparedness, he later made it clear that he was not referring to the content of the curriculum itself, because the curriculum is the same for every SSS student by law. Rather, his concern was curriculum delivery: “The mode, support for, and the human resources (teachers, technicians, assistants, and aides) are either of poor quality or even unavailable.” Agreeing with this concern, some participants contended that deficiencies in curriculum delivery represented a main source of SSS students’ low grades. For example, Dr. Legon 2 was referring to curriculum delivery when he stated that a basic hindrance to students’ eventual success in transitioning to a university or polytechnic was the lack of “a firm grasp of mathematics, English, and science, because they are not properly tutored in these courses.” However, to a lesser extent, one participant attributed students’ poor grades to poor study and learning habits.

In regard to aspects of the teaching-learning scenario that hindered effective teaching, three issues regarding curriculum delivery stood out for the participants: (a) the method of teaching, particularly its being less interactive, reflecting Freire’s (2006) banking concept, (b) the fact that teachers placed too much emphasis on the final examination, and (c) the effect on curriculum delivery of low morale, lack of motivation, and unqualified teachers.

Absence of the interactive quality of the teacher-student relationship was spoken of by participants as a function of both curriculum content and pedagogy. As a
One suggestion given by a participant was that the curriculum be revised to incorporate interactive lectures. In contrast, another participant attributed the lack of interactive teaching and learning to class size, the disproportionately large number of students now in classes—an infrastructural problem. From either perspective, there was a consensus among participants that both curriculum content and pedagogy should be revised to reflect interactive teaching and learning. An outcome of the lack of interactivity between teacher and student created by the lecture format was described by Dr. Legon 2: “[Rather than] exploring and developing” their own thoughts and ideas, SSS students learn by taking notes at the teachers’ lectures.”

Too much emphasis on examinations was another common criticism by the participants in regard to both curriculum and pedagogy. In the context of the importance of student preparedness, Dr. Legon 4 commented passionately, “Sure! Many of these students are ill-prepared. The concept of chew-pour-pass-and-forget still occurs. Students are prepared for examinations (WASSEC) and not intellectual development and skills.”

Along with others, Dr. Legon 4 proposed that terminal examinations be replaced with “more continuous assessments, project work, and group discussions.” Similarly, Daniel also suggested the need for ongoing assessment of students’ work—“an accumulation of works plus testing our students with numerous examinations”—rather than waiting until the end of the semester when they take the final examination.

In reference to aspects of the teaching-learning scenario that hindered effective teaching, the participants noted in general the need for improvement of the work environment. It was pointed out that teachers were not paid well, thereby not only hindering their motivation but also causing low morale. In Dr. Legon 3’s words,
Poor infrastructure [including the large student-to-teacher ratio] and low morale of those imparting knowledge have all hindered effective teaching, and yet, no serious commitment from government seems to come in dealing with the challenges.

Another participant contended that the occurrence of regular teacher strikes (for many reasons, such as delayed salary payment) hindered students' process. Here again, the underlying theme of the inadequacy of governmental involvement is evident.

In Dr. Legon 2’s view, the government has usually tended to focus only on the challenges of infrastructure related to higher education. He stressed the necessity of paying attention to the teachers also. In his words, “The system requires a blend of focus on infrastructure and teachers.” To this end, Dr. Legon 1 recommended (a) “providing accommodations for teachers in the community,” and (b) “involving the teachers to stay in the community where resources are drawn from elsewhere [everywhere].” Implying the need for more qualified teachers, Dr. Legon 1 added that “only trained teachers from the community should be recruited to teach in the senior high schools.” And overall, Dr. A stressed “better conditions of service” in order to attract faculty and non-teaching staff.

**Preparation for employment and human capital production.** Considered an outcome rather than a contributing factor of the crisis in higher education in Ghana, this fourth and final sub-theme—preparedness of students for employment and human capital production—reflecting the system’s major issues, represented a top priority for participants in terms of higher education reform. They viewed the link between higher education and the nation’s economy as fundamental and crucial. It is significant to note that in the aforementioned formal description of Ghana’s current higher education system, one of the participants included the statement that “the overarching goal [of
higher education] is to serve the national objective of a highly educated and skilled workforce.” Hence, particularly in light of higher education’s apparent unresponsiveness to the marketplace in terms of preparing students for employment, participants had a great deal to say about the importance of higher education in this role, as illustrated in the following interview excerpts.

Many participants stressed the need for higher education to train more middle managers and technicians to support the Ghanaian economy. Intertwined with this need was that of creating more jobs for graduates of higher education. The underlying rationale behind these needs of Ghanaian higher education in relation to the economy was provided by Dr. Francis as follows:

- The economy is not growing fast enough to keep pace with the increasing number of graduates who need jobs. Consequently, “most graduates from the Ghanaian universities cannot find employment in the top managerial positions.”
- Graduates returning from overseas universities are competing for the few available jobs, “unless they start their own businesses.”
- Students who cannot gain admission to higher education lack alternate opportunities.
- There is a brain drain of highly skilled professionals and workers in Ghana, because these individuals are seeking “greener pastures in the Western world…because of better employment opportunities”
- There is a lack of “more practical and relevant educational training, more beneficial to the Ghanaian economy.”
Dr. Francis contended that the creation of more jobs could be accomplished with the provision of incentives by the Ghanaian government to private businesses to create more jobs.

In a similar vein, Dr. Smart emphasized the inadequacy of higher education in providing marketable skills for all graduates. In his words,

The Ghanaian system chopped out illiterates as even most of those who completed the system doesn’t [sic] have marketable skills. They are not trained to create their own jobs; hence, most of them are relying on the government for employment. Unfortunately, there is the belief that the government is supposed to offer jobs to every graduate.

Whereas Dr. Francis placed emphasis on how the government can be of help in terms of providing incentives for businesses to create jobs, Dr. Smart contended that part of the problem is the mindset of reliance of the graduate on the government to furnish jobs, rather than looking to the higher education system to provide the marketable skills needed by the Ghanaian economy.

Dr. Mohammed provided the following description of the present situation in Ghana related to student preparedness and human capital production:

Various stakeholders (parents, students, employers, community advocates, and governments) have all complained of the low quality of the graduates of the various levels of the educational system. There is a problem of the schools churning out graduates who do not have the competencies in literacy and numeracy to enable them to continue their education or embark on continuous learning for self-improvement. Neither do many of the school leavers have the technical skills nor craftsmanship to prepare them for the world of work.

He indicated that in response to this situation, a first-time-ever pressure group emerged in Ghana, the Association of Unemployed Graduates, with a large membership. From the perspective of potential employers of these graduates, “the real problem is, most of these graduates have low employable skills.”
Dr. Mohammed recommended the following specific goals pertaining to student preparation for employment and human capital production:

- Appropriate essential skills for the workplace
- Adequate preparation for independent and self-supported transition from school to careers
- Satisfactory training and facilitation of students to be ready for the real challenge of the new century.

Dr. Francis added to these goals the need for “more encouragement for employee training and/or retraining from local businesses.”

Approaching the sub-theme of student preparedness and human capital production from a broader perspective, Dr. A spoke to the change that was necessary in the context of national and international considerations:

Now the world is geared toward globalization and the system therefore needs to be veered in that direction, notwithstanding extra focus on the needs of the country. The major issues that need to be addressed are [a] produce graduates who are internationally competitive, [b] produce graduates who have entrepreneurial skills, [c] education should be more research oriented.

Also looking at the bigger picture, Dr. Mark indicated that he would advocate for well-trained leaders who not only have a vision for the Ghanaian higher education system, but also are very knowledgeable about education on the global level.

**Needs of the Discontinued Students**

Currently, a major manifestation and consequence of Ghana’s transition problem is its tremendous pool of discontinued students. In considering how the needs of these unemployed youth might be addressed within the higher education system that is now in place, Dr. Mohammed proposed three general areas of focus:

- Essential skills assessment: literacy, numeracy, ICT [information communication technology] centers;
- Re-training in marketable skills: career bridge courses;
• Root-cause analysis for individual, group, and locale failures.

At the same time, he recommended the critical strategy of early intervention that incorporates “corrective and preventive initiatives.” His carefully thought-out suggestions in this regard are listed below:

• Fixing the non-uniform teaching and curriculum delivery across schools;
• Ensuring curricular content matches nation manpower and economic needs;
• Developing, sustaining and constantly reviewing staff and other human resource needs in the sector;
• Insulating the GHES as much as possible from the poor state of the nation’s economy, with adequate financing and regular payment of subventions;
• Reducing the effect of politicization of education;
• Decentralization of the procurement and servicing of equipment;
• Improving inadequate classroom accommodation;
• Revamping poorly equipped libraries;
• Building and refurbishing of modern laboratories, including ICT centers;
• Improving the supply of books at all levels of education.

Dr. Legon 1 strongly agreed that skills training should be the primary focus in regard to the large number of discontinuing students. More generally, Dr. Legon 2 believed that programs should be developed that address the weaknesses of the discontinued students. From a different perspective, Dr. Legon 4 offered the innovative idea that “students who drop out of school might be given scholarships to rewrite their examinations at a lesser cost or opportunities opened to them at other institutions.”

Dr. A’s strategy for addressing the large number of discontinued students in Ghana was to develop a new program that targets, in a program-specific way, these students’ inadequacies. After this has been accomplished, he pointed out that the students could then begin anew with their efforts to continue their education beyond senior secondary school. Dr. C recommended that agriculture be encouraged for these youth and for youth in general. As ways to address the discontinued student problem, he also
suggested both “skill training to enhance their marketability [as well as] entrepreneurship training.”

**Community College Model as a Solution**

Having examined through the eyes of the participants the major issues impacting Ghana’s higher education system (Theme 1), consideration of the U.S. community college model as a way to address such issues—the study’s second major theme—is now presented, based on the perceptions and perspectives of the participants. Their responses supporting this second theme have primarily been grouped according to three salient sub-themes: (a) applicable aspects of the U.S. community college model, (b) hindrances to adopting this model, and (c) overall consideration of adopting the U.S. model, including alternatives.

**Applicable Aspects**

Although the core aspects of access to all and equality in educational opportunity represented the primary focus of this study in terms of solving the transition problem, the participants were asked to consider *all* applicable aspects of the community college model that they would consider applicable to the issues and needs faced by Ghanaian higher education. Aspects perceived by participants as particularly applicable to Ghana’s situation include (a) access, including open enrollment (b) partnerships, (c) training of middle managers, (d) education linked to community needs, (e) practical versus theoretical focus, and (f) location of educational facilities. All of these applicable aspects of the U.S. model correspond to (and thereby address) major issues cited earlier by participants as negatively impacting higher education in Ghana (Theme 1).
**Access: Open admissions.** All participants concurred that the central aspect of the community college concept—access to all—was not only applicable but also critical to addressing Ghana’s higher education situation. Moreover, the majority of participants viewed the open admissions policy as a way to achieve access, which in turn impacted the transition problem. Therefore they believed the open admissions policy should be encouraged throughout the entire Ghanaian university system. Their comments underscored this point.

For Dr. Mark, two things were seen as totally different between the Ghanaian system and the U.S. community college system: the admissions process itself and the fact that “here in the USA, the community college students can take courses in bits,” which is not possible in Ghana. According to Dr. Smart, an open admissions policy would ensure that “everyone is given the equal opportunity to be educated.” Whereas Daniel of Tennessee perceived that the entire issue of access to all is dealt with in the U.S. system based on the students’ individual abilities, he also voiced the perception, common among the participants, that Ghana’s higher education system needed “open enrollment to provide access to higher education and ensure equity.” In conjunction with open enrollment, Dr. Francis added the provision of placement tests to assess the students’ academic abilities, as mentioned earlier. This is in line with Daniel of Tennessee’s comments about determining students’ individual abilities. Dr. Francis explained that the use of placement tests to assess students’ abilities could then be used to advise them as to what direction they should take—what classes they should pursue after graduation from high school or an equivalent, such as General Education Development (GED).
Dr. Mark made the observation that in the U.S. community college system, there were also impediments to the privilege of access to all. He gave the example of the U.S. students’ having to take the SAT (formerly called the Scholastic Aptitude Test) or other tests in order to get into college, as do students in Ghana. His point was that even in the United States, students do not get a “free ride.”

From an ideological standpoint, Dr. Smart compared the emphasis of the U.S. model’s admissions policy with that of the Ghanaian system’s admissions policy:

U.S. community college education is focused more in strengthening students’ abilities. On the other hand, Ghana’s system looks at individual weakness and eventually eliminates them [the students].

**Partnerships.** Participants strongly supported the partnership aspect of the U.S. community college model as both applicable and necessary to the Ghanaian situation. In the context of too many students for too few jobs, Dr. Mark proposed that partnerships be established between the Ghanaian government, its citizens, and the business community when considering reform of the higher education system. Kwaku contended that any change in the structure of Ghana’s higher education system must be linked to “a partnership between the business community and the academicians.” And more broadly, Dr. Smart advocated for multiple partnerships—with the United States, the Ghanaian business community, and the local communities in which the community colleges are situated. Daniel of Tennessee spoke of this same need for partnerships in Ghana’s situation, but in terms of coordination with other institutions of higher education, particularly because of the transfer capabilities inherent in the community college model. He pointed out that if community colleges were to be implemented in Ghana, they should be “affiliated with all the Ghanaian universities.” From the perspective of the business
community, Dr. Francis emphasized “increas[ing] more partnerships between local businesses and community colleges in providing training to their employees to improve performance.”

**Training of middle managers.** Although this aspect of the U.S. model—the training of middle managers—was not talked about as much as other aspects presented here, the participants’ sentiments on this aspect were especially evident during discussions regarding the lack of student preparedness for employment. Dr. Francis spoke specifically about this aspect, saying he liked the way community colleges in the United States provide the training of middle managers and considered this aspect of the U.S. model as a critical strategy for meeting the needs of Ghana’s workforce. Thus, he underlined the importance for Ghana of “promoting community colleges to train middle managers and technicians to fill the current job openings.”

**Education linked to community needs.** This was another aspect of the U.S. model that the participants perceived as essential for an effective higher education system in Ghana for the 21st century. Accordingly, in their consideration regarding implementation of the community college model for Ghana, they stressed the importance of focusing on curriculum development and design so that “the course contents of the community colleges should be geared towards the community” (Dr. Smart). Envisioning this aspect of the U.S. model for Ghana, Daniel of Tennessee stated that the newly established community colleges in Ghana must be “created for the community use.”

From a more proactive perspective, Kwaku of Tennessee saw as important the fact that the U.S. community colleges are well structured in their ability to prepare students to solve the problems of their communities. He perceived that in the U.S. setting,
students take back to their communities what they have learned. This was another way of saying what many of the other participants advocated—that education should be tied to the needs of the community, both locally and nationally. Kwaku concluded, “Ghana should learn from these behaviors and establish community colleges in solving their problems,” that is, Ghanaian higher education should be structured so that students can acquire the tools to solve the problems of the community, starting at the local level and extending to the country as a whole. For this to happen, Kwaku believed two things needed to happen: (a) a curriculum change must occur—one that would strongly emphasize the needs and problems of the community and, in turn, those of the country of Ghana; and (b) any change of this kind must be linked to “a partnership between the business community and the academicians.” In the end, referring to the Ghanaian universities and the proposed community colleges alike, Kwaku strongly believed that “all schools should be built for the needs of the society.”

**Practical versus theoretical focus.** This aspect of the community college model, discussed earlier, was embraced by the participants because it addressed their criticism of Ghanaian higher education’s theoretical focus at the expense of a more practical education. Accordingly, Dr. Smart stressed the importance of a more practical, hands-on educational experience, pointing out that the reason students succeed in the U.S. system is that there is an emphasis on hands-on teaching and learning—a more practical focus, in contrast to the Ghanaian emphasis on theory and research. Because of this characteristic of the U.S. system, “many students succeed without too much intimidation….At the final analysis, students are more confident with the hands-on experiences.”
Supporting the hands-on aspect of community college education, Kwaku of Tennessee believed that Ghana’s higher education system should “teach those who want to learn technical things,” such as car repair skills. He explained that in Ghana, a person must have attended a university in order to be recognized. In contrast, the community colleges in the United States provide business-oriented training, and consequently, graduates can immediately start their own businesses. They have the practical skills and do not need a 4-year degree to be successful. Moreover, Dr. Legon praised the hands-on type of education that was available to those community college students who were not interested in a degree in Liberal Arts or the Humanities.

**Location of educational facilities.** According to participants, U.S. community colleges were known for their more equal distribution of facilities across community types. In contrast, Ghanaian educational facilities tended to be located in the coastal areas, away from the rural regions. Referring to the possible adoption of the U.S. model for Ghana, Dr. Smart recommended that “the emphasis should be focused on community colleges instead of universities. That means each community or region should have a community college,” as is the case in the United States.

Similarly, Dr. Legon viewed the location of community colleges across communities throughout the United States as an aspect that would be particularly helpful in mitigating financial constraints—one of the hindrances to a tertiary education currently experienced by Ghanaian students. From his perspective, “[According to the U.S. model,] students are made to sign on to colleges that are [in] their neighborhood/close, which then removes the financial burden from poor families.” Another participant perceived that community colleges in the United States were promoted and encouraged, because
“[students] were advised to sign up to attend these colleges for proximity, convenience, and cost effectiveness” (Dr. C).

**Hindrances to Adopting the Community College Model**

The most salient hindrance the participants foresaw regarding the acceptance of the U.S. community college model for Ghana was the mindset of the populace regarding the community college concept and the value of education in general, hence the need to educate Ghanaian citizens in these two areas. Other hindrances that were anticipated by the participants corresponded closely to the major issues they described earlier as troubling the current higher education system in Ghana.

**Need to educate citizens on community college concept and value of education.** In terms of hindrances to transferring the community college model to Ghana, what stood out as a priority for many of the participants across all three groups of educators was the need to educate Ghanaian citizens on the community college concept. For example, Daniel of Tennessee agreed with the idea of establishing the U.S. community college model in Ghana if the Ghanaian community could be educated to clearly understand the community college concept and its benefits for the people and the country. But even more basic, he believed it was necessary to “educate our citizens to value education.”

Along similar lines, Dr. Legon 4 saw as a hindrance the “lack of publicity and engagement of stakeholders to understand the [community college] system.” Accordingly, he stressed the importance of the need for “community interest in establishing these colleges” and the availability therein of specialized courses. In the same context, he viewed as a potential problem the difficult task of promoting the
“perceptual understanding that the [community college] system is as good as a university degree.”

Dr. Francis added more specifically the need to “educate the population about the importance of higher education and its contributions to the economy in terms of providing employment and the overall quality of life in the communities,” for only then could the community college concept be fully accepted and welcomed by the citizens of Ghana. He went on to explain that Ghanaians currently hold the “image that community colleges are for the low-income students or underclass and/or students who could not make it to universities.” Therefore he warned that “most Ghanaians would have to change their attitudes of looking at community colleges as a second-class institution to universities.” Not only did Dr. Francis believe that Ghanaians’ mindset toward the value of education and the community college concept must be changed; he contended that Ghanaians would also need to change “their mindset of looking up to the government for everything, including establishing schools.”

Totally agreeing with this need to change the Ghanaian mindset, Dr. Smart related a personal experience that clearly illustrated his view: Several years ago, he published an article on the Ghanaian Internet that promoted the benefits of the community college model for Ghana. In consequence, he was attacked on many fronts—the criticism was voiced by people who had little or no real understanding of the community college concept. Thus, along with other participants, he strongly urged educating the citizens of Ghana about the community college system and its benefits and, in turn, the possibility of exporting this model to Ghana. He added that in doing so, “we have to remove all negativity, look at the good success stories of the community colleges.”
Hindrances corresponding to major issues regarding Ghanaian higher education crisis. In addition to educating the populace on the community college concept, the primary hindrances participants anticipated were mainly related to the current issues plaguing Ghana’s higher education system (Theme 1) that they had discussed earlier. Hence, with a few exceptions, many of the major issues were repeated by participants as hindrances to adopting the U.S. model, or for that matter, hindrances to undertaking any significant educational reforms.

For Dr. Francis, issues specifically viewed as possible hindrances included

- [No link between education and the marketplace. Remedied by] creating partnerships between local business and community colleges;
- [Lack of] financial support from the community and the government.

Dr. Mark viewed the lack of technology and on-line courses, as well as the fundamental need for textbooks and required reading materials, as potential hindrances to adopting the community college model. In this regard, he suggested that if the community college model were to be used in Ghana, it should follow the system put in place at the University of Cape Coast, although he did not elaborate.

Another hindrance mentioned was lower education standards, but this was not made clear regarding its connection to adopting the U.S. model. Corresponding to the opinions of other participants, Kwaku identified the scarcity of financial resources as a major hindrance to successfully exporting the community college model to Ghana.

Dr. Legon envisioned three current, critical areas of need that might serve as obstacles to implementing the U.S. community college model in Ghana:
The need for library facilities;

The need for educational reading material;

The need for improved infrastructure.

Kwaku of Tennessee contended that in light of the increasing population in Ghana, an important consideration, which would be an obstacle if not addressed, is the need for “more schools with trained professional university teachers that can be used in teaching students at the community colleges that we are advocating.”

Holding a similar view, Dr. Legon considered the existing infrastructure of Ghanaian higher education as a potential hindrance, particularly in terms of its “lack of qualified trainers and administration.” However, similar to Kwaku’s stance, he also foresaw lack of financial support as an even more fundamental hindrance to the vision of implementing the U.S. model in Ghana. Moreover, somewhat related, he emphasized the lack of government commitment to educational reform as a basic hindrance to transferring the U.S. community college model to Ghana. In line with this thinking, Dr. Legon stressed “lack of political will to tackle the challenges proactively.”

**Overall Perspectives on Considering the U.S. Model or Related Alternatives**

**Support for consideration of the U.S. model.** A majority of the Ghanaian educators supported consideration of the U.S. community college model in Ghana as a solution to its higher education problems, particularly in terms of transition capabilities that reflected the elements of access to all and equality in educational opportunity. Many participants also favored the U.S. model as a way of addressing other issues plaguing the system, such as better student preparedness for employment, including more training for middle-management positions. At the very beginning of his interview, Dr. Mark had
emphatically stated that Ghana’s higher education system needed a complete overhaul. To this end, he later conveyed his enthusiasm for the idea of exporting the U.S. community college model to Ghana. Viewing the idea as feasible, he voiced his support as follows:

Making community colleges as part of our tertiary education system will be wonderful indeed, and most of the burden will reduce. It can be done [by beginning to] integrate some courses and making the transfers to various universities possible.

Overall, participants’ specific statements regarding reasons for supporting the community college concept were directly related to aspects of the U.S. model they supported as being particularly applicable to Ghana’s situation.

One participant especially liked the fact that at a U.S. community college, students are able to take placement tests or remedial tests to address deficiencies that hinder them from entering higher education. Dr. Smart referred to the U.S. community college system as a success story that should be recognized by Ghana and other developing countries. He explained that “the police depot, firefighter, trained teacher, nurses, and so on can all be trained under the community college model.”

Speaking enthusiastically about the U.S. community college model, Daniel of Tennessee compared the perspective and design of the U.S. community college system with Ghana’s system of higher education with this response: “I see a great opportunity for others to study totally different from the Ghanaian perspective. The system here is designed for success and the Ghanaian one is designed for a failure.”

Dr. Francis believed it was both possible and feasible to integrate the U.S. model into the existing Ghanaian higher education system, particularly from the practical
standpoint of converting some of the institutions already in place into community colleges before creating new ones. He gave some examples of institutions already in place, such as Kumasi Technical Institute, Agricultural College at Kwadaso, Public Health Institute at Kintampo, and Ghana Institute of Management and Public Administration.

Some participants provided more general opinions of the U.S. community college system, such as its being a valid and respected option for students striving to go beyond senior secondary school. In Dr. A’s words, “The U.S. community college model is professionally oriented and equivalent to most university courses. It builds the students from the rubrics.” He also agreed with the possibility of adopting the U.S. model to help solve Ghana’s transition problem and, in turn, help ameliorate the large number of unemployed discontinued students. And finally, remarking about the promises inherent in adopting the U.S. community college model for Ghana, Dr. Smart alluded to the issue of postcolonialism when he concluded, “At the moment, the British are running away from their own model [the Oxford model], and it’s time for the Ghanaians to do the same.”

**Modifications to the U.S. model.** Whereas Dr. Francis strongly supported the adoption of the U.S. community college model for Ghanaian higher education, he made the critical observation that its key applicable aspects would have to be adapted to the unique culture, values, and needs of Ghanaian society. However, he optimistically concluded, “I do not believe that such modification would be major.”

**Related alternatives: Adding to what is already in place.** In addition to considering the idea of transporting an adapted version of the U.S. community college model to Ghana, other configurations, mostly related to applicable aspects, were
mentioned, such as integrating selected aspects of the model into educational institutions that were already in place in Ghana. Particularly in regard to the responses of the educators in Ghana, there was the sense that existing structures already in place in Ghana could be modified or improved upon to achieve outcomes shown to be beneficial in the U.S. model. For example, Dr. Legon 1 pointed out that the concept of the community college already exists in some communities in Ghana, albeit in disguise. However he proposed that these existing structures be improved and more efficiently organized. In support of his earlier statement about the value of the U.S. community college model in regard to students being able to attend college in their local communities, he emphasized that similar-type institutions in Ghana should be located in every community or region. Doing so would be “less costly and provide access to youths’ education.”

Dr. Legon 4 believed that both a polytechnic and community college education offered the opportunity for students to get practical learning. Whereas he definitely supported both the possibility as well as the feasibility of adopting the U.S. model in Ghana as a change agent, he likened U.S. community colleges to an expanded version of the polytechnics, particularly in terms of their focus on practicality. However, he foresaw hindrances in modifying the polytechnic model. An important difference he saw between these two models was in the urban location of the polytechnics versus the rural and community-based location of the community colleges in the United States. In his words, the U.S. model served as

the basis of expanding the polytechnics and [the model for making] it more practical. However, these polytechnics are centered in the regional capitals and so makes it difficult to many people to enroll. People also use it as the last chance to enter higher education.
Because Dr. A saw a similarity between the U.S. community college model and the polytechnics in Ghana, he directed his attention to the polytechnics—both its role as a solution and also in regard to obstacles to its effectiveness. He pointed out the discrepancy in standards between the senior high schools and the polytechnics as follows:

It [the polytechnic model] is based on the GCE “O” and “A” [Ordinary and Advanced] levels, which senior secondary school is below. This poses problems to the students [in terms of their transition efforts].

Continuing his line of thinking about the similarity between the polytechnic and the community college model, Dr. A proposed that Ghanaian students use the polytechnic pathway as a stepping stone to the universities. In his words, “Students can attend polytechnics to sharpen their intelligence and later transfer to or continue at the university.” However, he acknowledged a fundamental drawback with this idea: “The universities here do not accept grades from polytechnics”—a problem that he recommended should be changed.

Dr. C explained that certain aspects of the community college model had already been introduced in Ghana, therefore it was not a completely new idea, yet one that could be improved upon. He explained,

This practice has been introduced in Ghana. A lot of senior secondary schools have been established to serve communities. The schools are advised to give a certain percentage of intake to students from the community. This can be improved and recruitment made more transparent.

Again in terms of existing solutions, Dr. A mentioned that transition programs for certain courses have already been developed. In these courses, “students enroll at some levels and study to earn university degrees.” Nevertheless, both educational consultants seemed to favor the reform strategy of modifying existing educational structures in Ghana.
And finally, other solutions to Ghana’s higher education crisis, unrelated to the applicable aspects or modifications of the U.S. community college model that participants embraced, were also proffered. For example, Dr. C stipulated the following five goals that he believed would help ameliorate the transition problem:

1. The ideal of the model school started by the NPP [National Patriotic Party] government must be continued;
2. Qualified teachers must be recruited and motivated to peak performance;
3. There must be proper supervision of the schools to ensure high standards;
4. More infrastructure must be provided to less endowed schools;
5. Special incentive packages must be provided to teachers who want to teach in less-endowed schools.
CHAPTER 5. DISCUSSION, CONCLUSION, AND IMPLICATIONS

Discussion

This chapter analyzes and interprets the data regarding the thoughts and perceptions of participants comprised of educational experts and university professors in both Ghana and the United States. The findings seek to support the case for educational reforms in Ghana and the possible acceptance of the U.S. community college model as a change agent in Ghana’s higher education system.

Accordingly, this single case study looked at the central issue of consideration of the use of the U.S. community college model to address Ghana’s need for higher education reforms. This central issue not only corresponds to the study’s primary research question but also constitutes the main unit of analysis, which upon closer scrutiny, involves various dimensions or subunits of analysis. The two subunits that were seen as critical to an understanding of this central issue—the main unit of analysis—were major issues of the current Ghanaian higher education system that impact its transition problem and applicable aspects of the U.S. community college model that can make a difference in higher education reform in terms of resolving the transition problem.

Listening to the voices of participants with first-hand experience of Ghana’s higher education system, as well as participants with first-hand experience of the U.S. community college model, was integral to determining what lessons were learned from this study, not only in terms of answering the study’s research question, but also in regard to supporting and possibly adding new perspectives and dimensions to the existing
literature on this topic. Such perspectives and dimensions can serve as a springboard to
the further research needed to actually implement a culturally appropriate version of the
U.S. community college model in Ghana.

In order to arrive at lessons learned from this study, the findings related to each of
the two subunits of analysis must be examined more closely. In this context, a discussion
of what was reported by the participants, in conjunction with what was said in the study’s
literature review, which served as a backdrop for the study, is therefore provided in the
following two sections.

First Subunit of Analysis – Current Major Issues

Exploring the first subunit of analysis, *Major issues of the current Ghanaian higher
education system that impact its transition problem*, can be likened to putting
Ghana’s higher education system on trial in its current state. Put in place by former
British powers, this system continues to be strongly influenced by its colonial legacy in
the contemporary postcolonial era. Within the framework of postcolonial theory and
critical pedagogy, the literature reviewed for this study strongly supported this
assessment (e.g., Achebe, 1958; Atuahene, 2008; Chrisholm & Leyendecker, 2008;
Loomba et al. 2005; Mbembe, 2001; Mellow & Katopes, 2009; Obosu-Mensah, 2006), as
did the participants, who spoke of the current system as a poor blend of both British and
American influence. This has been so because of British colonial rule of Ghana and the
influx of American-trained Ghanaian tutors and professors in Ghana. In the context of the
need for reform, one participant observed that today’s postcolonial education system in
Ghana, following the colonial model, is one that “even the British are running away
from.”
On a more specific note, the interrelated issues of access to all and equality in educational opportunity were explored with respect to this first subunit that addressed multiple issues impacting Ghana’s higher education system, and the transition problem in particular. Within the scope of this exploration, special attention was given to how access to all and equality in opportunity related to three key elements of higher education—pedagogy, structure, and curriculum.

**Pedagogy.** The importance of applying postcolonial theory and the critical pedagogy perspective was most evident when exploring the current pedagogy in Ghana’s higher education system. Curriculum delivery was seen by the participants as a critical concern. Reminiscent of Freire’s attack on the banking concept and the nature of colonial pedagogy discussed by many scholars (e.g., Aronowitz, 2003; Chisholm & Leyendecker, 2008; Farr, 2009; Freire, 2006; McNeil, 1990), participants viewed the way teachers still teach students as in need of reform—a pedagogy that embraces the traditional, colonial ideology and style of teacher-centered learning versus student-centered learning with its encouragement of interaction, engagement, and creativity. As a side note, one participant perceived the lecture and note-taking style of teaching as the result of the too large class size.

It was generally felt that the system must also be altered to be able to prepare students to be independent and able to support themselves in their transition from school to the pursuit of their careers. To help accomplish this, teaching and learning must not always be aimed at terminal examinations, according to participants. Moreover, huge class sizes must be reduced, and teaching must be conducted in a very interactive and
congenial environment to facilitate or generate more student interest and acceptance of issues taught.

In addition to criticism as to the way teachers deliver curriculum, it was also brought out in the interviews that teachers had low morale and were poorly trained, poorly remunerated, and in general, poorly taken care of by the government, which represented the controlling arm of Ghana’s education system. In this regard, participants recommended that attention be paid to teachers as much as infrastructure in the context of reform.

**Structure/infrastructure.** Structural issues, both external and internal (infrastructure), were viewed by the participants as negatively impacting the higher education system, and most certainly the issues of access to all and equity in educational opportunity, directly and indirectly. Externally, structure was talked about by the participants, as well as in the literature (e.g., Girdwood, 1999; Manuh et al., 2007) in the context of lack of adequate financial support by the government to fund any significant reform efforts. In the words of one participant, financial support was needed to provide the “critical infrastructure to facilitate teaching, learning, and research.”

A large part of the problem related to inadequate financial support was attributed both in the literature (e.g., Armooh, 2007; Obosu-Mensah, 2006; Sackey & Mahama, 2010; Sefa Dei & Opini, 2007) and by the participants to lack of commitment and follow through by the government, as manifested in its political parties and policy makers, who have talked about the importance of education to national development, but seemingly have made little progress in terms of addressing the broader issues of access to all and inequities in educational opportunity (e.g., the gender gap and inequities regarding
socioeconomic status). In spite of the enormity of the challenges that confront Ghanaian senior high school students, in the words one participant, “Government seems not too committed to tackling educational challenges holistically.”

Participants indicated that some attempts have been made to improve curriculum delivery, recruit more qualified teachers, expand tertiary institutions, and so on. As mentioned, the various political parties have also espoused some ideas in relation to dealing with the transitional challenges. Again, there have been several reports of educational committees and commissions that have made suggestions regarding how to tackle the transitional challenges, including the need to design new curriculum that can compete internationally and improve technical and vocational intermediary education to train school dropouts.

However, these attempts have been ad hoc, piecemeal, and have often been changed with the change in government. The bane of Ghana’s educational system has been its excessive politicization by political leaders. For example, according to participants, at present, there seems to be no consensus—and therefore no consistency—about policies that govern the number of years students must spend in high school. Whereas some governments believed students must spend 3 years, others sought to change the terminal period to 4 years when they assumed the reins of power. Hence, there is no overarching policy to which all regimes and successor governments subscribe and strive to implement. Rather, policies governing the educational sector change with regime change. New governments introduce new policies which are often not properly implemented and are jettisoned and replaced with other new ones by successor governments. Consequently, there seem to be no proper coordinated plans or policies to
address the problems related to students’ transition to tertiary education. The lack of stable policies to govern the Ghanaian higher education system thus presents a monumental challenge to the system. In this regard, “stable and autonomous policies” were called for by participants as an important albeit indirect means of addressing issues related to the current crisis in higher education, such as lack of access to all and inequities in educational opportunities. In the context of the current postcolonial power structure, the participants suggested that the government not have control of higher education; in its place, there should be good coordination between the higher education system, the community, and the government.

The demand-supply gap, another aspect of structure, was stressed by scholars in the literature (e.g., Amenyah, 2009; Darvas, 2010; Girdwood, 1999) and participants alike. There is generally limited access to higher education in Ghana because not enough admissions openings are made available for the extremely large number of students who graduate from senior high school. Too few public tertiary institutions to meet the demand helps explain this limitation in admissions opportunities. On the one hand, there are too many applicants for too few institutions and facilities in tertiary education, with one participant pointing out that there were currently only three major universities serving more than 1,000 high schools. As a result, a significantly large student population drops out of school yearly, not because of academic weakness but due to lack of access to the tertiary institutions. On the other hand, enrollment expansion represents a critical need of Ghanaian higher education (Effah, n.d.; Ghana Facts, 2009) in order to help satisfy the high demand from SSS graduates who are just beginning to apply for a post-secondary education, as well as the enormous pool of discontinued students who might try again to
seek a higher education if opportunities were made available. A side note is that in the literature, it was pointed out that the demand-supply gap has led to repercussions, such as extreme competitiveness and corruption in admission policies (Amenyah, 2009). This was one area where the participants had little to say. One participant did mention the existence of corruption, but suggested that it be ignored—that it not be allowed to distract from the more important issues and tasks at hand regarding education reform.

Clearly related to the structural problems of inadequate financial support and government commitment, much was said by the participants about pressing needs associated with infrastructure. More support was needed, but also there was much that needed to be changed before issues, such as lack of access to all and inequity in educational opportunity, could begin to be addressed. In addition to the need for more attention to be directed towards the welfare and quality of the teachers, as mentioned above, the unavailability of sufficient textbooks, required reading materials, and technological resources, particularly in rural areas where the bulk of the population resides, has exacerbated the crisis in Ghanaian education, both at the tertiary and secondary school levels. New libraries were needed, and the setting up of model schools in various regions of the country was proposed by the participants. Moreover, the large classroom size was definitely seen as hindering effective teaching and learning, as indicated earlier.

Financial constraints experienced by SSS students and their families represented another structural-type issue that affected the ultimate goal of access to all and equality in educational opportunity. Although tuition at the senior high schools in Ghana is free, there are significant ancillary fees, periodic levies, and dues that a large number of
qualified students are unable to afford. Such fees include Parent Teacher Association
dues, School Development levies, and Student Representative Council dues, to name a
few. Such financial constraints represented yet another hindrance to students’ already
compromised efforts to be successful in their transition efforts.

Curriculum. The specific content and design of curriculum, per se, was beyond
the scope of this study. However, it is a fundamental element of the current higher
education system in Ghana, which, in turn, is strongly related to issues affecting its well-
being, such as lack of access to all and inequities in educational opportunity. Therefore, it
is included in the discussion of lessons learned from this study.

Participants decried the quality of education in relation to curriculum content,
specifically bringing up the fact that the curriculum in the senior secondary schools is
presently below the standards required to enter a tertiary institution. The senior high
school syllabus is below the former Advanced Level Certificate syllabus. Moreover, there
is too much emphasis on the final examinations rather than a quality education. This, in
itself, has a direct impact on the transition problem in terms of access: Senior secondary
school graduates are ill-prepared for the transition to a public university, and even if they
are able to pass the entry examination, they struggle academically once admitted—ill-
prepared academically, physically, and psychologically—leading to poor retention rates.
According to the literature review, scholars have pointed out that although curriculum
and program effectiveness are addressed frequently in Ghana’s higher education system,
the results have been disappointing (Amenyah, 2009; Atteh, 1996; Boakye-Agyeman,
2006; Maakora Radio UK, 2004).
Upon closer scrutiny, the curriculum is not practical. The participants decried the fact that the curriculum is designed so that the focus is on theoretical issues; thus it does not effectively train students be middle managers or to be able to be entrepreneurial with marketable skills and to address the problems and needs of the community. Instead, after graduating, students look to the government for employment opportunities, which are always limited and, many times, non-existent.

In Ghana, the educational curriculum is designed in such a way that there is always a disconnect between what is taught in the high schools and what is required by industry or the marketplace. Accordingly, there was consensus among participants that the educational curriculum must be redesigned to include more practical training in technical and entrepreneurial skills, thereby empowering students to deal with the challenges of society and transform the economy, meeting the employable demands and requirements of industry.

From this broader perspective, Achebe (1958), Mellow and Katopes (2009), and many others in the literature made the major point that the limited curriculum in the universities still reflects colonial influence, particularly in regard to not being responsive to the country’s indigenous culture or the needs of the community, marketplace, and workforce. In this respect, participants correlated the need for a responsive curriculum with the purpose of education. Comments reflecting this perspective ranged from, “Education should serve the purpose of training students to solve the problems of the community, and in turn, the nation” and “All schools should be built for the needs of the society” to “Education must be structured to provide more training for middle-
management positions and technicians in the workforce.” All of these references to education point to curriculum ideology as well as content.

In the bigger picture, numerous scholars in the literature (e.g., Amenyah, 2009; Atteh, 1996; Mbembe, 2001; Morapedi, 2004; Obosu-Mensah, 2006; Sackey & Mahama, 2010; Zeleza & Olukoshi, 2004) as well as the participants viewed education, through its curriculum, as a way to help Ghana grow stronger as a nation and compete globally.

**Second Subunit of Analysis – Applicable Aspects and Adapting the U.S. Model**

Regarding this second subunit of analysis, any discussion related to what aspects of the U.S. community college model would be most applicable if community colleges were to be established in Ghana must take into account the current needs and issues that are plaguing Ghana’s higher education system. Such needs and issues—findings of the first subunit—were discussed above as a backdrop for determining what aspects might be most relevant and helpful to Ghana’s present situation.

**Applicable aspects.** There were many applicable aspects of the U.S. model addressing the issues and most pressing needs of Ghanaian higher education that were agreeable to the participants. In addition to the most highly advocated aspect, access to all, which incorporates the aspect of equality of educational opportunity, some of the key aspects highlighted by participants included (a) practicality; (b) adaptability—relevance of education to the needs of the community, marketplace, and workforce; (c) the link between the community and education, such as partnerships with businesses and industry; (d) geographic location; and (e) affordability. These aspects are briefly discussed from the participants’ perspectives, after which special attention is given to the primary aspect
of access to all in relation to considering the U.S. model as a solution to the Ghanaian situation, because this aspect represents the core of the U.S. community college model.

Practicality was considered an important applicable aspect of the U.S. model by the participants. As mentioned in the earlier discussion related to the first sub-unit of analysis about curriculum, they believed that Ghanaian higher education should be more practical and less theoretical in its teaching philosophy and subsequently, in its curriculum. Whereas in the United States, community colleges are established, in part, to help students solve the problems confronting the local communities, the curriculum in Ghana’s higher education system is designed so that the focus is on theoretical issues; thus it does not effectively assist students to be able to proffer practical, relevant solutions to societal problems. It was pointed out that in Ghana, a person must have a university degree to be recognized. In contrast, in the United States, it was perceived that the community colleges not only serve as a stepping stone to a 4-year college, but also provide technical, hands-on training and business-oriented training, with the result that graduates can immediately start their own businesses or enter the workforce. In this scenario, community college students have learned the necessary practical skills and do not need a 4-year degree to be successful.

Adaptability, one of the core aspects of the U.S. community college model that led to its success (Schuetz, 2002), was correlated by the participants with the relevance of education to the needs of the community, marketplace, and workforce. For example, speaking of the direction that community college education should take in Ghana, one participant emphasized, “The course contents of the community colleges should be geared towards the community needs.” Participants believed strongly in the importance
of higher education’s capacity to adapt its education via its curriculum to community needs and problems. One participant made the observation that education should be “created for the community use.” U.S. community colleges were considered to be well structured in their ability to prepare students to solve the problems of their communities. Based on his experience teaching in a U.S. community college, another participant perceived that community college students are trained to take back to their communities what they have learned.

Closely related to the aspect of linking education to the marketplace and societal needs, the interrelated aspect of partnerships was also seen by many participants as applicable to the Ghanaian situation. The creation of partnerships between industry or local businesses and the educational institutions, as in the U.S. community college model, was viewed as an essential element of Ghanaian educational reform.

The community college model’s open admissions policy was strongly supported by the participants and especially stressed by those who were teaching at community colleges in the United States. Participants perceived that this was the fundamental way that community colleges addressed the challenges of limited admission opportunities: It is through their open admissions policy that community colleges are able to give equal admissions opportunities to everyone in the community. Revealing a major ideological difference between the Ghanaian higher education system and the U.S. community college system, participants explained that this important policy places much emphasis on the strengths of the applicants, whereas in Ghana, admissions requirements or policies eliminate students or applicants by focusing on their weaknesses.
The location of community colleges, well distributed throughout communities in the United States, has resulted in accessibility to higher education for students everywhere in the country. This was another key aspect of the U.S. model that the participants strongly supported for Ghana. Participants stressed that geographic location was known to affect SSS students’ opportunities for entering a tertiary institution, with students from rural areas being negatively impacted. One participant explained,

Schools in or near the rich urban centers are able to produce students with better grades for the transition….For some students, family, social, and other commitments do not allow them to move to a tertiary institution if it involves significant distance. Schools considered to be “good” are located in the coastal areas, denying the rural folks, who are in the majority, equal opportunity to access the schools. In contrast, U.S. community college students were perceived to be able to attend colleges in their own communities or nearby.

In discussing this issue of location disadvantage, the applicable aspect of affordability was also brought up—the fact that more even distribution of colleges across communities and regions would make more affordable a tertiary education, because it would relieve families of the financial burden of room and board and other expenses related to living far away from home while attending school. In the end, according to participants, this aspect of the U.S. community college model regarding geographical location—more even distribution of educational facilities—would contribute greatly to achieving the goal of access to all and equity in educational opportunity.

**Access to all: Considering the U.S. model.** Participants unanimously viewed the fundamental goal of access to all as paramount to “fixing” many of Ghana’s higher
education problems, including the transition problem. The goal of access to all coincides with the ideology of the U.S. community college model. Thus, based on its central mission regarding access to all, the U.S. model was generally perceived by participants in all three groups as a possible and feasible solution to Ghana’s issues of access to all and equality in educational opportunity, but particularly by those who were presently teaching at community colleges in the United States as well as by the Ghanaian educators interviewed for the study in Ghana who were more familiar with the U.S. model. The U.S. model was also seen by many as a way to address other issues and pressing needs of the Ghanaian higher education system, such as the need to provide more training for middle-management positions and technicians in the workforce.

There were differing views among the participants on how to accomplish access to all that did not directly include transporting the U.S. model to Ghana; nevertheless, their solutions incorporated much of the U.S. model’s ideology. Some of the participants less familiar with the U.S. model talked more generally about the need for Ghana to develop alternative pathways. Others suggested modifying various institutions in higher education that already existed in Ghana in ways that could address such problems as access to all and equity in educational opportunity. For example, one participant recommended that before creating new community colleges, some of the institutions already in place could be converted and modeled along the lines of the U.S. community college system. Some of the existing tertiary institutions mentioned by the participant include the Ghana Institute of Management and Public Administration (GIMPA) in Legon, Accra; Agricultural College at Kwadaso in the Ashanti region; Public Health
Institute at Kintampo in the Brong Ahafo region; Kumasi Technical Institute in the Ashanti region; and Accra Technical Training Centre in Accra.

Another participant asserted that certain aspects of the community college model had already been introduced in Ghana, and therefore it was not a completely new idea, yet one that could be improved upon. Similarly, a participant observed that the concept of the community college currently existed in some communities in Ghana, albeit in disguise. He also supported the proposed idea that these existing structures be improved and more efficiently organized. Expansion of the polytechnics was also noted as a possible solution, but it was pointed out that the location of the current polytechnics is away from the rural areas and therefore not accessible to a large number of students. In this regard, another participant pointed out that grades would need to be transferable from the polytechnics to the universities, which is not presently the case.

So in this sense, not everyone embraced the U.S. community college model per se; but all embraced the idea of at least integrating applicable aspects of the U.S. model into the current system to address the problems plaguing Ghanaian higher education. No one objected to or rejected the notion of the community college concept.

Critical limitations to the feasibility of adopting the U.S. model as a solution to Ghana’s higher education crisis, including its transition problem, were revealed in the form of hindrances that the participants anticipated. Most of these hindrances to the community college solution would seem to apply to almost any substantial reform efforts. These obstacles and drawbacks were, in fact, viewed by participants as current contributors to Ghana’s higher education crisis. As such, the hindrances foreseen by participants closely corresponded to the most pressing needs and issues talked about
throughout the interviews, as well as highlighted in the literature review (e.g.,
Akyeampong, 2010; Amenyah, 2009; Chrisholm & Leyendecker, 2008; Dijkstra &
Peschar, 2003; Girdwood, 1999; Darvas, 2010; Manuh et al., 2007; Mellow & Katopes,
2009; Sackey & Mahama, 2010). Among the hindrances anticipated to indirectly impact
the feasibility issue, the most strongly emphasized by participants included (a) lack of
financial support and commitment by the government, (b) inadequate infrastructure, (c)
lack of connection between higher education and the marketplace in the form of
partnerships, (d) inadequate educational resources, poor library facilities, and lack of
technological labs and equipment; and (e) lack of quality teachers.

Two other hindrances mentioned by the participants applied directly to the
possibility and feasibility of the U.S. model for Ghana: (a) lack of understanding of the
community college concept, which called for educating the Ghanaian people on the value
and benefits of using the U.S. model, and (b) the issue of cultural differences, suggesting
the need to adapt the model so as to be culturally appropriate for Ghana.

The first of these latter hindrances reflected the reality that Ghanaians do not have
a good understanding of the community college concept, and therefore there are many
misconceptions. For example, in the words of one participant currently teaching in a U.S.
community college, “Most Ghanaians would have to change their attitudes of looking at
community colleges as a second class institution to universities.” Experiencing avid
criticism regarding his efforts to promote the U.S. community college model, another
participant also called for the educating of Ghanaian society about the community college
concept: “We have to remove all negativity, look at the good success stories of the
community colleges.”
The second hindrance directly applicable to a discussion of the feasibility of adopting the U.S. model was the issue of cultural differences. The need to adapt the U.S. model so as to make it sensitive to Ghana’s indigenous culture was only brought up in a direct way by one of the participants during discussions about hindrances and feasibility. Participants emphasized the importance of linking education to the marketplace and community needs, which was another way of ensuring that education became a reflection of societal needs and values. Yet, the need to modify the community college model to make it culturally appropriate, per se, was not vocalized—it was most likely assumed. In contrast, scholars in the literature review were more emphatic on this point regarding attention to Ghana’s indigenous culture, particularly those who embraced the postcolonial theory-critical pedagogy perspective (e.g., Achebe, 1958; Arnove, 1980; Atteh, 1996; Cain, 1999; Cesaire, 2000; Chrisholm & Leyendecker, 2008; Irele, 2011; Loomba et al., 2001; Mbembe, 2001; Mellow & Katopes, 2009; Obosu-Mensah, 2006; Sackey & Mahama, 2010).

Recommendations to Meet the Challenges

Several practical recommendations were made to deal with the challenges that confront Ghana’s higher educational system. First, the educators placed much primacy on the need to motivate and provide incentives for the tutors and teachers. Ghanaian teachers belong to the category of workers who are poorly remunerated. A university degree holder who teaches, for instance, receives a monthly pay of around US$300. This lowers morale and makes teachers lackadaisical in their output in the classroom. Moreover, this has compelled many to refuse postings to teach in the rural hinterlands, whereas other degree holders have shunned the teaching profession entirely. The result is instances
where unqualified and unprofessional people have been recruited to teach. Consequently, higher educational standards have not been attained and weak students have not been properly taken care of.

A second recommendation is for governments to endeavor to build at least two model schools in all the regions of the country, for a start. These should be equipped with well-resourced libraries, internet facilities, laboratories, textbooks and other teaching aids and learning materials. These schools should be properly supervised to ensure higher standards.

Thirdly, Ghanaian students seem to have more of a predilection for universities. Yearly, about 75% of admission applications to the tertiary institutions go to the universities, and many students apply to the polytechnics when they have failed to secure admission to the universities. Against this background, it is highly recommended that a synthesis is found between the weight of courses and programs offered at both the universities and polytechnics, so that more students would be attracted to the polytechnics in order to ease the pressure on the universities and offer technical and vocational training to more people. Again, it should be possible for students to transfer their grades and/or credits from the polytechnics and continue their studies in the universities, as in the U.S. community college system. Also, in the United States, community colleges offer training to middle managers and technicians to be able to fill job openings. Furthermore, just as it is in the United States where many community colleges are established in local communities, more universities and other tertiary institutions should be set up in the various regions and districts in Ghana, so people would not have to travel solely to urban centers to attend colleges. This would also ensure
that there are numerous pathways for all categories of students seeking to pursue advanced studies. In essence, this would ensure that every student is offered admission based on his or her ability, as the case of the U.S. community colleges vividly depicts.

Fourthly, in the United States, partnerships are built between local businesses and community colleges in providing training for the former’s employees to improve performance. Similarly, this could be replicated in Ghana to build a strong linkage between industry and educational institutions in order to ensure that graduates are equipped with skills that are required by industry and that posture them in solving problems relating to their communities.

A fifth recommendation is that the government as well as the business community must increase its financial commitment to the educational institutions. In the United States, financial support from government and private businesses continues to strengthen community colleges to deliver on their mandates. On the contrary, in Ghana, many senior high schools do not receive adequate funding and subventions from the government. Apart from the paucity of government subventions, the timing for sending subventions to the schools has always been bad. Indeed, many schools receive their subventions when schools are on recess or vacation. It is therefore recommended that both government and the private sector must see investment in the educational sector as critical to national development. Such investments must be timeous enough to meet the demands and challenges of the educational sector.

**Comparison of Emphases Among the Three Groups of Educators**

Perceptions and opinions varied among the three groups of participants, but also reflected many similar as well as unique thoughts, critiques, perspectives, and
suggestions. Overall, there appeared to be no notable contradictions among the participants’ views of the study’s topic. Mostly, it was the emphases among the three groups of participants that differed on needs and issues and solutions.

Group 1, the Ghanaian educators who were currently teaching in community colleges in the United States, placed much more emphasis than did the other two groups on the various key aspects of the U.S. model that they believed would be particularly applicable and helpful in addressing Ghana’s situation, especially in relation to the issues of access to all and equality in educational opportunity, and in turn, the transition problem. Accordingly, the sub-themes that emerged from their responses regarding thoughts on specific applicable aspects included many more items than those of the other two groups of participants. Such sub-themes included open enrollment, training of middle managers, education linked to community need, practical versus solely theoretical focus, and partnerships.

In comparison, not all of the Ghanaian professors teaching in Ghana (Group 2) were familiar with the U.S. community college model. This limited somewhat their input on aspects of the model that would be applicable to Ghana’s higher education needs. Thus, their foci were mainly related to the sub-themes of (a) expanding the location of the facilities across communities and regions, thereby removing the financial burden from students and families; and (b) the practical, hands-on approach to education provided by community colleges. The education consultants (Group 3) also appeared less familiar with the U.S. model and thus were limited in their input regarding aspects of the model that would be applicable for Ghana’s situation. Instead, their interests were directed more
towards ways to utilize and reform the tertiary education institutions that were already in place.

As expected, Group 2, the Ghanaian professors teaching in Ghana, had the most to say of the three groups about the current state of Ghanaian higher education (Theme 1). The sub-themes that emerged from their responses included (a) poor infrastructure, including inadequate resources (e.g., classrooms, laboratories, and computers); (b) attention to conditions and treatment of teachers; (c) low quality of the curriculum (d) inadequate support systems (internal and external), including administrators, career counseling and support; and (e) lack of stable and autonomous policies. Although the education consultants’ (Group 3) attention was also directed more to an emphasis on the current state of Ghanaian higher education in terms of its issues and challenges (Theme 1), they covered less issues than did Group 2. The sub-themes that emerged from their responses regarding the first theme focused in large part on the quality of the curriculum and pedagogy issues, but also on the need for improved infrastructure and financial support.

**Participants Views Not Highlighted in the Literature**

Although the scope of the literature review for this study could not be all-encompassing in regard to every aspect of the study’s topic, most of the perceptions of the participants were supported by scholars reviewed for this study. There seemed to be no evident contradictions. As stated earlier, the differences uncovered in the study were more a matter of the emphasis given to particular issues. For example, the literature was more vocal on the issue of education’s needing to be more culturally appropriate than were the participants, although this was mentioned. Moreover, the study’s literature
review decried more strongly the British colonial influence on Ghanaian higher education than did the participants. And whereas both the literature and the participants focused much attention on the need to improve infrastructure, some participants also highlighted the lack of sufficient emphasis by government regarding needs related to the teachers. Accordingly, one participant suggested that instead of the government’s focusing solely on improving the poor infrastructure of higher education, “the system requires a blend of focus on infrastructure and teachers.”

There were a few points made by the participants that were not mentioned in the literature review for this study. One consideration was that Ghanaians needed to change “their mindset of looking up to the government for everything, including establishing schools.” Participants pointed out that university graduates had the unrealistic expectation that the government would provide jobs for them after graduation. On another dimension, one solution by a participant to the access problem that was not promoted in the literature review was embracing an affirmative action policy.

Little was found in the study’s literature review that talked about the fate of the school leavers, except for the fact that there was a tremendous pool of them, which was a great loss of valuable talent to the country. One participant had the innovative suggestion of offering scholarships to discontinued students to enable them “to rewrite their examinations at a lesser cost or [to help with] opportunities opened to them at other institutions.” In addition, participants brought up the issue of the unemployability of these discontinued students, who were not trained for the few jobs that were available in the marketplace, although it was mentioned that some training was beginning to be offered by the government. Explaining some of the reasons for the enormous number of
discontinued students, teen pregnancy also emerged as an issue that was not highlighted in the literature review, whereas AIDS issues were not mentioned.

Another point not emphasized in the literature that was perceived by participants as a contributing factor in students’ unsuccessful attempts at transitioning was the impact of regular teacher strikes, occurring for many reasons (e.g., delayed salary payment), which hindered students’ process. The poor quality of curriculum—its low standards—at the secondary school level was also mentioned by participants as a factor in students’ subsequent transition efforts. And “fixing the non-uniform teaching and curriculum delivery across schools” was urged by one of the participants, a suggestion not highlighted in a review of the literature. A final recommendation also not emphasized in the literature was “insulating the GHES [Ghanaian higher education system] as much as possible from the poor state of the nation’s economy, with adequate financing and regular payment of subventions.” None of these observations are new to educators and others knowledgeable about Ghana’s higher education crisis; rather, they seem to have received less attention in the overall scheme of things. Hence, attention to these less highlighted perceptions and suggestions of the participants can help balance the perspectives that are more evident in the current literature. Moreover, they can be used as additions to the body of knowledge on this topic, perhaps deserving of more consideration.

**Synthesis of the Findings: The Main Unit of Analysis**

In the final analysis, a synthesis of the findings from the first subunit of analysis related to Ghana’s problematic higher education issues, with the findings from the second subunit regarding applicable aspects of the U.S. model has helped bring to light the essence of this complex case study: insight into not only how the U.S. model can be used
as an agent of change in addressing the present Ghanaian higher education crisis, but also more specially, *what* needs to be done to reform current transitional capabilities, so that all senior secondary students are given the opportunity to access higher education and succeed.

Findings from the first subunit of analysis (reflecting the first research sub-question) revealed *how* Ghana’s current issues could be addressed—what “most pressing needs” should be targeted regarding Ghana’s higher education system. In doing so, these findings provided the foundation for determining what applicable aspects of the U.S. community college model should be considered in implementing an adapted version of this model in Ghana—the second subunit of analysis (reflecting the second research sub-question). For participants, the most critical applicable aspect seemed to be access to all (which included equity in educational opportunity). The other applicable aspects emphasized were (a) practicality; (b) adaptability—relevance of education to the needs of the marketplace, workforce, and the community; (c) the link between education and the community in terms of partnerships with businesses and industry; (d) geographic location; and (e) affordability. All of these aspects directly address the issues and most pressing needs of the current Ghanaian system of higher education. The fact that all of these aspects represent fundamental elements of the ideology and mission of the community college model in the United States makes an adapted version of the U.S. model a particularly good fit as a solution to Ghana’s higher education crisis, including its transition problem.

An analysis and interpretation of the data helped determine that it was not solely the issue of pedagogy, such as teachers’ methods and skills, or the issue of
structure/infrastructure, or that of curriculum, but rather a combination of all three components that has played a role in negatively impacting access and equity in educational opportunity, and ultimately, the senior secondary school students’ ability to transition to a higher level of education. Overall, as a solution, participants were unanimous in their view that either a culturally appropriate adaption of the U.S. community college model or an integration of its applicable aspects into the Ghanaian higher education system should be considered. Scholars in the literature were in full agreement with this conclusion (e.g., Atteh, 1996; Atuahene, 2008; Boakye-Agyman, 2006; Bogue, 1950; Boughey, 2002; Carey, 2009; Floyd et al., 2005; McMurtrie, 2009; Mellow & Katopes, 2009; Obosu-Mensah, 2006; Raby & Valeau, 2009; Smith, 2000).

Canada’s Experience With Establishing Community Colleges

Much can be learned from Canada’s implementation of the community college model as a major means of reforming its higher education system. According to Dennison (1980), the Canadian community college movement emerged after World War II, beginning in the province of Alberta as a new educational innovation that began spreading gradually to other provinces. The Canadian community college system, modeled after the U.S. community college system, came to serve as a safety net—a second chance for those who were unable to pursue university education. Canadians adopted this model as a tool for educational reform at a time of “dramatic political change, when particular phenomena were shaping new priorities for social institutions” (Dennison, 1980, pp. 2-3). Part of such phenomena was the establishment of the Canadian community college system, along with the growth of technologies, a reflection of the changing workforce, and the escalating demand for students to go beyond
secondary school education (Dennison, 1980). Mirroring societal needs, the changing demands of the labor market required a more educated workforce.

The establishment of Canadian community colleges was not by chance, but rather, purposefully undertaken to address the issues of accessibility, with open admission policies, provision of preparatory programs, promotion of diversity, and flexibility of the structures of scheduling; its emphasis was deeply rooted in teaching rather than research (Campbell, 1971; Carusetta & Cranton, 2009; Dennison, 1980). Further, the Canadian community colleges adopted the America model with an emphasis on granting diplomas to their communities rather than degree-granting institutions (Dennison, 1980; Roger, 2004). And of particular importance, community colleges in Canada have been mandated to prepare students for a specific field of study within as well as beyond their local communities and worldwide. Speaking of the newness of the community college college concept in Canada, Campbell (1971) noted in his book, *Community Colleges in Canada*, that its “uniqueness stems in part from its liberal admissions policy and its doors are open not only to the university bound but also to those seeking vocational training in preparation for a career” (p. 8). In the end, by establishing a new multi-purpose tertiary institution that can provide a wide range of educational options for its clientele, the Canadian model closely resembles the traditional United States community college prototype in terms of its practical commitment to the democratization of educational opportunity (Dennison, 1980).

Thus, community colleges in Canada have purposely been designed to be responsive to Canadian local government direction regarding changes in the economy in order to provide specialized services needed in their local communities (Campbell, 1971;
Carusetta & Cranton, 2009; Roger, 2004). In this regard, Canadian community college education is entrusted to its provincial government and territories. The federal government also plays a significant role; however there exists no central governmental department of higher education. Instead, the provinces and territories not only place the responsibility of higher education, including decisions related to the community colleges, in the hands of members of an elected cabinet but also delegate specific parts of their higher education spectrum to various governmental departments within each provinces and territory (Dennison, 1980; Jones, 1997; Rogers, 2004). Governance of the community college system in Canada cannot be generalized across all of its provinces and territories as a whole; in fact, provinces and territories have adopted a strong tradition of community-based decision making that operates under the direct authority of the provincial government directions (Dennison, 1995; Jones, 1997; Roger, 2004). Overall, this direction Canada has taken—particularly regarding governance and responsiveness to societal needs, but also in other ways mentioned above—is the direction I strongly urge for Ghana in its consideration of the U.S. community college model as a major reform strategy for the Ghanaian higher education system.

**Conclusion**

The developmental challenges facing not only Ghanaian education but also that of the entire continent of Africa are more daunting than anywhere else in the world (Morapedi 2004; Zeleza & Olukoshi, 2004). These challenges therefore require greater attention and commitment from both the nations therein and the world community as well (Armooh, 2007). More particularly, regarding the critical need to focus on the country’s continuing progress as a new democratic society, Ghana is faced with numerous
problems that must be resolved. Therefore, the structural problems that continue to plague Ghana’s higher education system, as evidenced by its failure to meet the goals stipulated by Ghana’s Tertiary Education Project (1993-1998), cannot be easily ignored. The imbalance between available financial support and the expansion of enrollment has been and continues to be an enormous hindrance.

Hence, “a key priority for the Ghanaian government will be that of ensuring a greater balance of funding to enrollment, whilst still seeking to promote equity” (Girdwood, 1999, p. xiv). Moreover, the disconnect between Ghana’s past and present governments, as reflected in current priorities, support, and commitment to higher education reform, represents a major factor to be addressed in the total picture regarding tertiary education reform.

The postcolonial theory-critical pedagogy framework is not only important to an analysis of Ghana’s current state of higher education. It is also essential to laying the foundation for the development of an innovative solution to the higher education crisis in Ghana—a solution that reaffirms African values, identity, culture, and their relevance (Cesaire, 2000), yet is a unique fit for Ghana. Moreover, utilizing a framework that integrates postcolonial theory with critical pedagogy will help to achieve a higher quality of education by, for example, ensuring that (a) new teaching methods will be introduced, thereby challenging the former British-dominated teaching system that mirrors the banking concept of education; (b) the learning environment of the community college will not be dominated by the teacher alone, but rather will be driven by student needs and, in turn, the indigenous needs of Ghanaian society; and (c) student retention will be significantly improved. Thus, this comprehensive framework has been—and must
continue to be—used to scrutinize Ghana’s higher education system, not only in terms of its importance as an historical condition, but also as a means of changing the way Ghanaians think about the world, and in particular, about their education.

The idea of establishing an adapted U.S. community college model in Ghana, including a culturally appropriate curriculum, as an agent of change cannot be overlooked (Atteh 2006; Cohen & Brawer, 2008: Mellow & Katopes, 2009). Regardless of the global circumstances, community college education has played an indispensable role in transforming any society, and in this case, could help the Ghanaian society put away the colonial legacy that continues to haunt higher education in the postcolonial era. As suggested by Mellow and Katopes (2009), “The best way to address this new global challenge…is to adopt the framework embedded within the structure, mission, and ideals represented by the American community college model” (pp. 56-57). Directly and indirectly, the result will be to enlighten the Ghanaian people, strengthening their mindset and enhancing their confidence as a people who are no longer victimized. In the process, this requires advocating for education that promotes an interdisciplinary and multidisciplinary approach to problem solving from a postcolonial theory-critical pedagogy perspective rather than laissez-faire attitudes (Armooh, 2007; Atteh 1996; Obosu-Mensah, 2006; Raby & Valeau, 2009; Zeleza & Oluskoshi, 2004).

Of great significance, the long-term consequences of establishing a community college system in Ghana will be to create an educated population (Dr. Obosu-Mensah, personal communication, July 10, 2010). Introduction of the U.S. community college model could seriously reduce the high rate of senior secondary school students in Ghana who have discontinued their efforts to gain a further education, especially in regard to
transition from the senior secondary school level to that of higher education (Atteh, 1996; Mellow & Katopes, 2009; Obosu-Mensah, 2006). Many researchers (e.g., Brothers & Higgins, 2008; Chrisman, 2003; Morapedi, 2004; Palinchak, 1973; Parnell, 1986) have promoted a community college agenda that, in general, focuses mostly on educational interventions. Nevertheless, it is essential that this agenda also be designed to incorporate the ultimate vision of producing Ghana’s future workforce. An educated workforce is needed in building the new infrastructures for any democratic country, and in this case, Ghana is no exception.

In short, guided by the indispensable framework that combines postcolonial theory with critical pedagogy, the scenario of advocating for new solutions, such as the proposed American community college model, along with a culturally appropriate curriculum, provides Ghanaians with direction regarding reform of their education system. These perhaps represent reform objectives that are more manageable and realistic—and less overwhelming—than the complex reform agenda set down in the World Bank/Government of Ghana project, the Tertiary Education Project. As Cain (1999) emphasized, “A new focus is needed” (p. 11). At this point, Ghanaian education is looking for a new sense of direction, and the adaptation of the U.S. community college model may be the map. If the implementation of the community college model becomes a high priority for the Ghanaian government in terms of financial support and supervision (rather than control), Raby and Valeau (2009) strongly believed, along with Weber (1998) and others, that through the moral and social discipline of the community college design, the nation of Ghana can achieve significant economic development, political hegemony, and international respect.
The importance of adapting the community college model to fit Ghana’s needs, culture, and values cannot be overemphasized. Moreover, such adaptation should manifest the ability “to address access and opportunity, advance or deal with implications of globalization, and develop a responsive trained work force” (Raby & Valeau, 2009, p. 1). Applicable to Ghana’s situation, Bogue (1950) reminded American audiences that the President’s Commission on Higher Education designated community colleges as the general movement of education reforms—community colleges that are community centered and community serving in regard to the spirit of the calling in American people. This is the same spirit that is now burning in the blood of the Ghanaian community.

Not only the Ghanaian government but also the Ghanaian people must take on the responsibility of addressing their educational pedagogies, helping their children access higher education. As affirmed by numerous scholars close to the African situation, such as Armooh (2007), Atteh, (1996), Atuahene (2008), Boakye-Agyeman (2006), and Obosu-Mensah (2006), regardless of the circumstances, “education has been proven the world over as a powerful tool to reducing poverty and for solving the numerous problems and challenges facing us” (Armooh, 2007, p. 1). Therefore the essential role of higher education in transforming developing countries must be recognized. Simply stated, the urgent need to transform the Ghanaian higher education system is to “make the ordinary citizen capable of becoming what he/she could become” (Armooh, 2007, p. 2).

Implementation of a version of the American community college model that reflects indigenous societal needs, culture, and values could encourage participation from all sectors of society and address the essential goal of equal access to higher education for all citizens of Ghana. In the end, if the American community college model is properly
adapted abroad, particularly in developing countries such as Ghana, it carries the potential of demonstrating “in a practical way, the means by which new generations can receive skills to ensure a stable employment that in turn increases economic development, social prosperity, and improve social conditions” (Raby & Valeau, 2009, p. 1). As emphasized throughout this dissertation, the direct and indirect benefits of such reform of Ghana’s higher education system are monumental in scope and embedded in promises that are achievable.

The great significance of using case study methodology to address this study’s topic is in line with Stake’s (2005) assertion that “the case study…can be a disciplined force in setting public policy….The utility of case study research to practitioners and policy makers is in its extension of experience” (p. 460). Stake’s words capture the ultimate intent of this exploratory, instrumental case study. In the end, my journey throughout this dissertation research process also enhanced my own experiences and learning, as a researcher dedicated to finding solutions that substantially improve the Ghanaian higher education system and possibly greatly impact Africa’s higher education crisis as a whole.

**Implications for Future Research**

Above and beyond consideration of the American community college model in this study as an agent of change regarding Ghana’s higher education system, challenges regarding implementation of such an endeavor must subsequently be taken into account. Accordingly, it is essential for future research to include the in-depth exploration of issues related to “planning, budgeting, governance, interdisciplinary studies, and local partnership” (Atteh, 1996, p. 1; Obosu-Mensah, 2006). Future studies might also look at
factors that have sharpened the persistence of inequalities in Ghana’s educational structures. Such factors are based on issues of ethnicity, class, gender, religion, ability, and the North and South dichotomy in educational development (Sefa Dei & Opini, 2007). These issues, along with other forces, such as those that are economic and political in scope, are an indication of limitations of the inclusion agenda of the governments of developing countries (Fentiman, Hall, & Bundy; Logan & Beoku-Betts, all referred to in Sefa Dei & Opini, 2007). At the same time, it is essential that further research take into consideration the postcolonial theory-critical pedagogy perspective prior to actual implementation of the U.S. community college model in Ghana.

Furthermore, it is critical that future studies should focus on the curriculum component of the adapted version of the U.S. community college model in developing countries, such as Ghana. For, fundamentally, the effectiveness of any community college model ultimately rests on its curriculum (Manning, Stanford, & Reeves, 2010). For example, future studies might explore current U.S. curriculum trends as a means of overhauling postcolonial curriculum design. However, in the context of duplicating American community college curriculum development in Ghana, there is a plethora of other ingredients that require very careful consideration (Ediger, 2002, p. 1) and thus provide material for future exploration. For example, it is critical that researchers’ attention be directed towards the need to make careful decisions about standardizing Ghanaian community college instruction so that students will be able to receive the same content at any community college they attend in the country. At the same time, the community college curriculum must be fluid enough to accommodate the variant student needs and limitations. Accordingly, additional research is needed to determine
appropriate content standards in all curriculum areas that reflect the indigenous and
global needs of the Ghanaian people.

From an educational theoretical standpoint regarding consideration of the U.S.
community college model as solution to the Ghanaian higher education crisis, it would be
valuable for future research to explore education theories (e.g., those related to the
process of learning and thinking), particularly those that embrace the critical pedagogy
perspective. Such theories can serve as a fundamental guide to designing a
comprehensive curricular model that helps improve the quality, relevancy, and
effectiveness of Ghanaian higher education.
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Personal Interview

Dr. Obosu-Mensah, Professor, Lorain Community College, Elyria, Ohio (July, 2010). Dr. Obosu-Mensah, an expert with the Lorain Community College model, has been working with the Ghanaian Board of Education and politicians in maintaining an offshore campus of the Lorain Community College Branch in Ghana.
APPENDIX A

National Center for Education Statistics Report on Accomplishments of the U.S. Community College Model

To the credit of the importance of the community college model in the United States, the National Center for Education Statistics (NCES, 2008) reported the following statistics:

1. In 2006-07, there were 1,045 community colleges in the United States, enrolling 6.2 million students (or 35% of all postsecondary students enrolled that year).

2. Average annual community college tuition and fees are less than half those at public 4-year colleges and universities and one-tenth at private 4-year colleges and universities.

3. Community colleges enroll a diverse group of students with various reasons for going to college and have larger percentages of non-traditional, low-income, and minority students than 4-years colleges and universities.

4. High school seniors who enrolled immediately in community colleges in 2004 spanned a broad range of academic achievements—including students who were well-prepared for college in terms of their performance on standardized tests and coursework completed. They included a greater percentage of well-prepared seniors than did the 1992 senior cohort.

5. About two-thirds of 2004 seniors who enrolled immediately in a community college seem to have done so with the intention of pursuing a bachelor’s degree or higher: As high school seniors, 28% had planned to use a community college as a stepping stone to a bachelor’s degree, and 39% revised their original plans to attend a 4-year college and earn a bachelor’s degree by starting their post-secondary education at a community college.

6. One-third of 2004 seniors who enrolled immediately in a community college did so with no intention of pursuing any education higher than an associate’s degree; however, by 2006, almost 47% of this group had raised their educational expectations to start or complete a bachelor’s degree. (Executive Summary, pp. 1-2)
# APPENDIX B

## Six Sources of Evidences: Strengths and Weaknesses

<table>
<thead>
<tr>
<th>Sources of Evidence</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
</table>
| **Documentation**   | Stable - can be reviewed repeatedly.  
- Unobtrusive- not created as a result of the case study  
- Exact - contains exact names, references, and details of event  
Broad coverage - long span of time, many events and many settings |  
- Retrieval ability - can be difficult to find.  
- Biased selectivity, if collection is incomplete.  
- Reporting bias - reflects(unknown) bias of author  
- Access - may be deliberately withheld. |
| **Archival records** |  
- (Same as those for documentation)  
- Precise and usually quantitative |  
- (Same as those for documentation)  
- Accessibility due to privacy reason. |
| **Interviews**      |  
- Targeted - focuses directly on case study topics  
- Insightful - provides perceived causal inferences and explanations |  
- Bias due to poorly articulated questions  
- Response bias  
- Inaccuracies due to poor recall  
- Reflexivity  
- Interviewee gives what interviewer wants to hear. |
| **Direct observation** |  
- Reality – covers events in real time.  
- Contextual - covers |  
- Time consuming  
- Selectivity – broad coverage difficult without a team of |
<table>
<thead>
<tr>
<th>Participant observations</th>
<th>(Same as above for direct observation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Insightful into interpersonal behavior and motives</td>
</tr>
</tbody>
</table>

| Cost | hours needed by human observers |

| Physical artifacts | Insight into cultural features. |
|                   | Insightful into technical operation. |

| Selectivity | Availability |

APPENDIX C

Informed Consent Form

Consideration of the U.S. Community College Model to Address the Need for Higher Education Reform in Ghana

You are invited to participate in a study that will explore how the U.S. community college model can be used as an agent of change in addressing the present Ghanaian higher education crisis, particularly in terms of its transition problem. The study is conducted by John Kwame Asubonteng Rivers. Results will be used to bring an in-depth understanding of the consideration of how and why the U.S. model will be an appropriate alternative solution to the Ghanaian higher education crisis. John Kwame Asubonteng Rivers can be reached by phone at 720-475-0090 or at johnkarivers@gmail.com. This project is supervised by the Chair of the committee and project supervisor, Dr. Frank Tuitt, College of Education, University of Denver, Denver, CO 80208 (Tel: 303-871-3373, ftuitt@du.edu).

Participation in this study should take about one to two hours of your time. Participation will involve responding to approximately 7-10 questions about the topic under study. Participation in this project is strictly voluntary. The risks associated with this project are minimal. If, however, you experience discomfort, you may discontinue the interview at any time. We respect your right to choose not to answer any questions that may make you feel uncomfortable. Refusal to participate or withdrawal from participation will involve no penalty or loss of benefits to which you are otherwise entitled.

Your responses will be identified by a pseudonym of your choosing only and will be kept separate from information that could identify you. This is done to protect the confidentiality of your responses. Only the researcher will have access to your individual data, and any reports generated as a result of this study will use only group averages and/or paraphrased wording. However, should any information contained in this study be the subject of a court order or lawful subpoena, the University of Denver might not be able to avoid compliance with the order or subpoena. Although no questions in this interview address it, we are required by law to tell you that if information is revealed concerning suicide, homicide, or child abuse and neglect, it is required by law that this be reported to the proper authorities.

If you have any concerns or complaints about how you were treated during this study, please contact Sylk Sotto, Research Compliance Manager at the Office of Sponsored Programs at 303-871-4052 or write to the University of Denver, Office of Sponsored Programs, 2199 S. University Blvd., Denver, CO 80208-2121.
You may keep the above page for your records. Please sign this next page if you understand and agree to the above. If you do not understand any part of the above statement, please ask the researcher any questions you have.

I have read and understood the foregoing descriptions of the study called *Consideration of the U.S. Community College Model to Address the Need for Higher Education Reform in Ghana*. I have asked for and received a satisfactory explanation of any language that I did not fully understand. I agree to participate in this study, and I understand that I may withdraw my consent at any time. I have received a copy of this consent form.

Signature _____________________ Date _________________

Additionally,

___ I agree to be audio taped.
___ I do not agree to be audio taped.
___ I agree to be videotaped.
___ I do not agree to videotaped.

Signature _____________________ Date _________________

___________ I would like a summary of the results of this study to be mailed to me at the following postal or e-mail address: ___________________________________________
Dear Faculty Members:

My name is John Kwame Asubonteng Rivers and I am a Ph.D. student at the University of Denver. At the moment, I am working on completion of my dissertation that explores the current higher education system in Ghana as well as the consideration of transferring an adapted version of the U.S. community college model as an agent of change in addressing issues facing the Ghanaian higher education system, such as its transition problem, which results in a large pool of “school leavers.”

You are hereby identified as a person who can provide useful information for this case study regarding my dissertation topic. I hope that you are interested and willing to participate in an in-depth interview that focuses on my topic. The interview will last about 2 hours and can be conducted in a location convenient to you.

I appreciate your understanding and consideration in helping the research move forward. I know that your time is valuable, and once again, I thank you.

John Kwame Asubonteng Rivers
Ph.D. Candidate
Graduate Student
Higher Education Program
Morgridge College of Education
University of Denver
Denver, Colorado,
720-475-0090, johnkarivers@gmail
APPENDIX E

Guide to In-Depth Interviews for Professors in the United States
(For Ghanaian professors previously or presently teaching in community colleges in the United States)

Interview questions aligned with the 1\textsuperscript{st} research sub-question regarding what major issues in the Ghanaian education system need reform in relation to the transition problem and why this problem is a key component of Ghana’s tertiary education crisis:

1. Based on your Ghanaian background and your experience with the U.S. community college model, what do you see as the most pressing need or needs for the Ghanaian higher education system for the 21\textsuperscript{st} century?

2. Looking at the current Ghanaian higher education system, discuss your thoughts about whether the system needs some alteration. If so, what major issues should be addressed?
   - Or, should it maintain whatever is already in place? Please explain.

3. More specifically, what are your thoughts regarding the Ghanaian system’s transition problem—Ghanaian discontinued students’ inability to make the SSS transition to higher public education?

4. What are your views on the issues of access for all and equality in educational opportunity, and how are they related to the transition problem in Ghana?

Interview questions aligned with the 2\textsuperscript{nd} research sub-question as to what key aspects of the U.S. model might be applicable to the Ghanaian situation and to the primary research question as to using the U.S. community college as a way to address the Ghanaian higher education crisis:

5. Please explain how these issues are addressed in the U.S. community college system (if not discussed above).

6. How can the issues of access to all and inequities in educational opportunities in Ghana’s system be addressed (if not discussed above)?
7. What other aspects of the U.S. community college model do you see as applicable to the problems faced by Ghanaian higher education?

8. More specifically, what other aspects of the U.S. model would be applicable to Ghana’s transition problem?

9. What kind of changes are you willing to advocate for and integrate into the Ghanaian higher education system?

10. What are your thoughts regarding exporting the U.S. community college model to Ghana?

   - Do you consider it possible and feasible for the Ghanaian education higher system to integrate the U.S. community college model into what is already in place? Please explain.
   - What are some of the hindrances you foresee?
   - Are there ways in which you think the key applicable aspects of the U.S. model should be modified in order to meet the unique culture, values, and needs of Ghanaian society?
APPENDIX F

Guide to In-Depth Interviews in Ghana

(For current professors in the Ghanaian higher education system and also for two educational consultants, both of whom serve in the Ghanaian Ministry of Education.)

Interview questions aligned with the 1st research sub-question regarding what major issues in Ghana’s higher education system need reform in relation to the transition problem and why this problem is a key component of Ghana’s tertiary education crisis:

1. How do you describe the Ghanaian higher education system of learning?
2. What do you see as the most pressing need or needs for the Ghanaian higher education system for the 21st century?
3. Discuss your thoughts about whether the system needs some alteration. If so, what major issues should be addressed?
   - Or, should the Ghanaian higher education system maintain whatever is already in place? Please explain.
4. Are there problems with Ghanaian senior high school (SHS) students’ making the transition to a university or polytechnic?
5. What are the components that retard the students’ progress, especially making the transition to higher education?
6. Does the Ghanaian higher education system have plans to address the transition problem and the resultant issue of discontinued students in regard to access and equity in educational opportunity? Please explain.
7. How might the Ghanaian education system address the needs of discontinued students within the education system that is now in place?
Interview questions directly aligned with the primary research question as to consideration of the U.S. community college model as a way to address the problems in Ghana’s higher education system, particularly its transition problem:

8. Are you familiar with the U.S. community college model? Please explain.
9. Based on your familiarity with this model of higher education, is it possible or feasible for Ghana to adopt the U.S. model as an agent of change in addressing their discontinued SHS students who fail to transition to higher education?
10. What are some of the hindrances to this idea that you foresee?
11. What other solutions to this problem might be considered?
APPENDIX G

Questions to Consider When Coding Field Notes

- What are people doing? What are they trying to accomplish?
- How, exactly, do they do this? What specific means and/or strategies do they use?
- How do members talk about, characterize, and understand what is going on?
- What assumptions are they making?
- What do I see going on here?
- What did I learn from these notes?
- Why did I include them? (Emerson, Fretz, & Shaw as cited in Saldana, 2009, p. 18)