

**PROBLEMS, PRESSURES AND POLICIES AFFECTING THE PROGRESS OF
THE CARIBBEAN EXAMINATIONS COUNCIL EXAMINATIONS: A
POSTCOLONIAL RESPONSE TO SECONDARY EDUCATION IN JAMAICA**

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DECLARATION AND WORD COUNT

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ABSTRACT

Various factors have impacted on and fashioned Jamaica's secondary education. Firstly, colonization saw the introduction of an imported British foreign system. Then, political independence led educators and nationalists to advocate for an examination system, which would meet the needs of the populace. Consequently, the Caribbean Examinations Council, (CXC) was established to design and implement relevant, culture-specific curricula and examination systems. However, this local examination body has not been able to address all the problems associated with the legacy nor cater to the various demands of the nation that have been imposed by external agencies and globalization.

This single case study, which draws on theories of education, colonialism, globalization and post colonialism, examines the extent to which CXC examinations have successfully replaced colonial examinations in Jamaica. Various methods were utilized to ascertain a range of views and embrace both qualitative and quantitative traditions: – interviews with CXC personnel, government, education and industry officials; a survey with teachers, examination of census data and documentary analysis of reports were the data collection strategies. An analysis of the syllabuses reveals the extent to which the content, assessment and suggested methodologies adequately prepare Jamaicans to contribute to national development and function effectively globally.

Findings indicate mixed perceptions about CXC's effectiveness. While the examinations are adequate in terms of their Caribbean content, student-preparation and the availability of access to more students, success rates, especially in Mathematics and English at the CSEC levels, have been deemed unacceptable. Findings also show that various internal and external factors, including the colonial legacy, neo-colonialism and the demands of globalization drive the education product and impact CXC students' success.

The implication is that the Government, stakeholders and Council will have to continue to undertake revisions of syllabi, effect curricular, infrastructural and administrative changes to improve their offerings to meet the demands of globalization.

Impact Statement – Erica Gordon

Education is an essential component of any national agenda. Globalization and the internationalization of education have ensured that educational concerns are pivotal in discussions about national development. Small developing, post-colonial states, like Jamaica, have directed much attention and resources to improving their education systems. Despite such efforts, the inherited colonial system, which privileged a few and disenfranchised the majority, continue to negatively influence education development. Postcolonial states thus continue to grapple with various issues related to identity, independence and hegemony and constantly struggle to meet the social needs of their citizens. Education is a seminal social service because of its roles and functions in nation building and citizen formation.

My research corroborates the view that various problems, policies and pressures continue to impact the Jamaican education system. Despite efforts to decolonialize and embrace the Caribbean Examinations Council (CXC) examinations, in a bid to make the education system more relevant to local needs, the system bequeathed by the former masters along with social, financial and infrastructural problems have rendered the efforts of the Council inadequate in many regards. Although most students perform admirably, compared to performance on colonial examinations, many do not meet required standards in key subjects such as Mathematics and English. More research can be undertaken to uncover other variables that impact performance in these subjects. Other subjects could also be examined, and comparisons done with performance on British-based examinations to illustrate the extent to which there have been improvements in students' performance since the adoption of the postcolonial model.

The views of stakeholders representing various sectors of the Jamaican society, and captured in the research, confirm that CXC2 is not the main cause of the problem. The inhibiting factors are more complex. Government and school board policies, financial constraints, demands of international bodies, terms and conditions of grants and loans, conditionalities imposed by the International Monetary Fund,

requirements of globalization and the bid to remain relevant and focused on local development needs, all impact the education development of this small state.

The Government of Jamaica, as well as those of other small states, should heed the advice of the stakeholders and initiate steps to address the issues raised, in a bid to improve the performance of students in key areas and ensure their preparation to perform adequately globally. This may mean developing policies which govern curricula, giving due attention to the vocational and technical areas, improving infrastructure and pedagogy, as well as harnessing the skills and resources of the private sector to assist in preparing students for the working world.

It is my intention to publish my findings in local and international fora. It would also be worthwhile to conduct research in other Caribbean countries that pursue CXC exams to compare the performance of students. Additionally, comparisons with other small states beyond the Caribbean, such as the South Pacific states, could also help to illuminate the issues with which small states contend and the extent to which the pressures, policies and problems that they face can be mitigated or eradicated to facilitate success among students at the terminal stage of their secondary education.

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CHAPTER ONE

INTRODUCTION

Background

In order to understand the factors that have impacted the Caribbean Examination Council's (CXC's) efforts to successfully provide a replacement for colonial examinations in Jamaica it is important to establish and comprehend the background that led to the establishment of the CXC. This background has its roots in colonialism. Caribbean societies are linked by a heritage of colonialism due to centuries of European control. The lives of the colonists were determined, to a great extent, by what transpired in the governing European countries. Education was not exempt. In the pre-emancipation era, some Europeans resident in the colonies sent their children home to be educated, while many imported tutors and governesses for their children. Schools were later established to provide a superior type of education for wealthy white boys. Except for religious instruction, the black population received no formal education.

In the post-emancipation era, the need to provide educational opportunities for a wider percentage of the population became evident. Although the planters balked at the idea of educating the ex-slaves, the government in England thought it would prevent the populace from lapsing into inactivity and barbarism. Consequently, the Act of Emancipation included a grant to provide schooling for ex-slaves (King, 1972; Gordon, 2009).

The system of education, which persisted, was unsuitable for the black population because both curricula and teachers were from England and hence there was a cultural barrier (Bailey, 1997; Rush 2011). The popular belief, fostered by colonialism, was that anything that emanated from the metropole was superior to anything produced in the colonies. As a result of the perceived inadequacies of the system, numerous critics and stakeholders, including educators, government officials, English school inspectors and heads of commissions of enquiry, repeatedly lobbied for changes in the system, to render it more applicable to the needs and experiences of the majority of the population. The emphasis on the classics and arts

subjects, it was believed, was misplaced in a society that should be seeking to develop scientific knowledge and a leadership base to ensure continuity (Gordon, 1963; King, 1972; Lewis, 2004). Additionally, there was the need for structured secondary education.

Much of the education in Jamaica up to 1879 had been to primary and elementary levels. In 1879 a plan was devised to provide secondary education from public funds (King, 1972; Lewis, 2004). The aim was to make education more relevant. Nevertheless, the curriculum implemented was British. The terminal examination was the English-based and controlled Cambridge Local Examinations. Persons desirous of being respectably employed saw these examinations as their only passport. To adequately prepare for these examinations, the teachers were forced to follow the English Grammar school curriculum slavishly (Whyte, 1977; Petgrave, 2011; Burnham, 2008). What the education system offered then, was classical education, the European grammar school model. The Cambridge Local Examinations continued until the 1950s, when they were replaced by the General Certificate of Education (GCE) at the Ordinary and Advanced Levels. These were merely other forms of the Cambridge examinations (Bailey, 1996; Griffith, 1999).

Given the incompatibility of these examinations, as far back as 1946, Caribbean leaders advocated a Caribbean-based examination for certifying students at the secondary level. Nationalism, and the sentiments it evoked, ensured that these cries were re-echoed in the early 1960s. Bailey cites Figueroa's opinion on the need for changes in education, which arose out of the 1961 Conference of Caribbean Heads of Secondary Schools. The conference participants also shared the view that secondary education in the Caribbean should do more to help young people to establish their identity as West Indians. The overriding view was that if Caribbean peoples continued to import educational curricula, the newly developing nations that were gaining independence would "expose themselves to a powerful force of cultural imperialism and therefore perpetuate their dependency" (Bailey, 1996, p.94 citing Crossley, 1984, p.75; Rush, 2011). These nationalistic sentiments, fuelled by independence, and viewed through a post colonial lens, which necessitated regaining one's own voice, drove the mission to establish local examinations via the CXC. The formal body, referred to as CXC or the Council, was established in 1972 and it was

mandated “...to develop and implement a Caribbean examination ... to replace the GCE Ordinary Level and similar examinations conducted in the region by overseas examining syndicates” (Bailey, 1996, p. 90), although not to be a replica of Cambridge or London.

The arguments posited by various writers indicate that the intention of the CXC was to replace the overseas-based exams with examinations suited to the needs of Caribbean people and testing a wider range of abilities (Bailey, 1996; Rush, 2011; Walter, 1982). The CXC sought to provide “quality education for all” (Griffith, 1999, p.5). In keeping with this objective, subjects were offered at both basic and general proficiency levels initially in the Caribbean Secondary Examinations Certificate (CSEC) and then technical and vocational levels were added. CXC’s mission statement encapsulates it all: “... the CXC is seeking to provide the Caribbean with syllabuses of the highest quality, valid and reliable examinations and certificates of international repute for students of all ages, abilities, and interests” (Griffith, 1999, p.8; Stephens, 2004; Gordon, 2009).

The Council, desirous of broadening the scope of its mandate, grappled with the need to provide a “post-secondary examination that would be relevant to the circumstances of the region and the changing global environment in which citizens must live” (Griffith, 1999, p.7). These concerns gave birth to the Caribbean Advanced Proficiency Examinations (CAPE) in 1998, examinations that encompassed academic, technical and vocational subjects that replaced the Cambridge Advanced Level (A Level) examinations (Stephens, 2004). CSEC and CAPE are the examinations that are offered. The former at the secondary level and the latter at the post secondary level. Thus, the region, in a postcolonial move, would further embrace and promote their own story – writing a narrative of their own creation

Because of the range of subjects, the emphases of syllabuses, the various proficiencies offered and the modes of assessment, Caribbean Secondary Education Certificate (CSEC) and CAPE have been hailed as examinations that are more appropriate for Caribbean people and contributing to the development of the region. Griffith notes that the “Council has contributed considerably to the process of regional integration and the development of the identity of the Caribbean citizen” (1999, p. ix).

It is noteworthy that not only have CSEC and CAPE been accepted and embraced across the region, but universities in the United States of America (USA), Canada and the United Kingdom (UK) have also accepted the qualifications as part of their matriculation requirements. The CXC is a dynamic institution and therefore evaluation and adjustments are still carried out to ensure that the practices are current and capable to compete in the global marketplace. CXC, like many other products emanating from the Caribbean, is influenced by globalization which requires changes in administration, infrastructure, national education systems and assessment practices. The CXC's efforts to meet the needs of the small states of the Caribbean merit examination to evaluate the extent to which they are successful in their postcolonial endeavour.

Rationale

Much research has been undertaken on education systems in small states like Jamaica. Educational experts and scholars highlight the fact that some of these states continue to depend on metropolitan examination bodies. They proffer various reasons for the continued dependence including the need to be accepted on the international market and the state of penury (Fergus, 1991; Watson, 1984, 2012; Bray & Steward, 1998; Udagama, 1987; Hickling-Hudson, 2004, 2014; Miller, 1987a, 2005; Packer, 1991). Notwithstanding these reasons, small states, like Jamaica, have established their own examination boards and others have anchored themselves to regional examination boards that prepare syllabi, administer examinations and issue certification. The South Pacific Board for Educational Assessment (SPBEA) and CXC are two regional boards that have successfully assumed the roles of former colonial examination bodies (Augier & Irvine, 1998; Udagama, 1987; Hickling-Hudson, 2004, 2014; Miller, 2005).

Given the shift from the British-oriented examinations to the regionally-based CXC examinations, this research is significant because it seeks to assess the extent to which in Jamaica, the CXC has successfully replaced the GCE Ordinary and Advanced Level examinations. Success can be measured by the number of students from the age cohort who pass the examinations, the abilities of students

accommodated by them and the extent to which they are prepared to function in the global marketplace. Also, the extent to which CXC has carried out its mandate to replace the British-oriented examination can act as a measure of its success. Another factor that justifies the need for this research is that although there is much published material about secondary education in Jamaica leading up to the 1980s, there is need for more published materials after the 1980s and into the new millennium; (see for example Abbott, 1980; Miller, 1990; 1999a; Bacchus, 1986; 1993; 2001; 2005; King, 1972; 1979; 1999; Gordon, 1963; 1968; and Whyte, 1977; 2000). In addition, this research is unique because it seeks to compare the performance of students at both examinations simultaneously. Having searched the literature, I have not unearthed any study that comprehensively compares students' performance on both sets of exams. Thus, a comparison is necessary, given the progress that CXC is believed to have made. A frank assessment is judicious to evaluate graduates, ensuring that they are not ignorant and ill-equipped to facilitate a revisioning of reality through the native, postcolonial eye, national development and function effectively in the global workplace.

These rationales are based on the premise that assessment tools and curricula should evolve to meet changing societal needs and to take advantage of novel, emerging educational theories and technology. Thus, over time, nations evaluate their examination systems, and, if necessary, institute changes to benefit both citizens and countries. This explains why GCE Ordinary Levels evolved into General Certificate of Secondary Education; (GCSE) and Advanced levels became Advanced Subsidiary (AS) and Advanced (A) level exams. These changes are not unique to small states. England, whose curricula and examinations Jamaica once relied on, has made changes to meet its citizens' needs and the challenges of the global economy. Traditionally, as part of the curriculum development process, developers periodically undertake extensive evaluation, to identify and correct weaknesses. In a similar vein, this assessment of CXC examinations could prove worthwhile in helping to redesign, correct, adapt, and/or change, if necessary, the current syllabuses and examinations.

As an educator, and one who has been exposed to both Cambridge O and A Level Examinations and CSEC Examinations, I have a personal interest in these

research findings. Additionally, public secondary schools in Jamaica have been mandated to pursue studies leading only to CXC and CAPE examinations except in those cases where the upgraded secondary schools do Secondary School Certificate (SSC) examinations, designed by the Ministry of Education. It would be interesting to ascertain the extent to which, in stakeholders' opinion, CXC examinations have met their stated objectives, cater to the needs of Caribbean people and prepare students for the world.

The Argument

My argument is that stirrings of nationalism and financial constraints led the Jamaican government to embrace CXC examinations. Due to globalization, policies and pressures of financial arrangements with international lending agencies which dictate expenditure and budget allocation, efforts have and are being made to further tailor the secondary education system to meet national and global trends and needs.

To meet national trends, CXC was able to provide a localized curriculum that is more cost effective for Jamaica. However, its limitations lie in the fact that the examinations are regional and not national, so not all of Jamaica's national goals are being met by CXC examinations. Additionally, fears of the lack of international recognition of the qualifications limit their acceptance. Critics of the system point to the low success rate of students especially in Mathematics and English Language examinations as systemic weaknesses. Nevertheless, others highlight the variety in the courses, the high standards maintained, acceptance by international bodies, the opportunity for students to take a wide cross section of subjects and the School Based Assessment (SBA) component of the programme as strengths, which are profitable for the nation. It is my view, that CXC examinations have successfully replaced the GCE examinations, but other factors such as the race/class dichotomy, the legacy of colonialism, demographic factors, arrangements with international lending agencies and schools' internal systems all mitigate the students' success in examinations. An examination of the CXC through post colonial lenses, which seek to

see with new eyes and reinvent inherited narratives, can help to throw light on the extent to which they have been successful.

Aims

The aims of this research are:

1. To review the reasons for the replacement of colonial examinations by CXC examinations and the impact of these on their implementation.
2. To assess the extent to which the Caribbean Examinations Council examinations have

successfully replaced colonial education and examinations and prepare students for globalization.
3. To explore the reasons for the current state of implementation of CXC examinations in Jamaica.

Research Questions

1. How does the CXC reflect the tensions and pressures of modernisation through a neo-colonial legacy in a period of globalisation?
2. What are stakeholders' views regarding the extent to which CXC examinations have successfully replaced colonial examinations in Jamaica in terms of the requirements of national identity and preparation for globalisation?
3. How might the CXC develop in the light of these tensions and findings?
4. What tensions and contradictions have been played out in the implementation of CXC in the Jamaican context?

Research approach

The overall research approach draws on both qualitative and quantitative methods in order to harness the strength of each method in examining the case. Interviews with government and CXC officials, educators at the tertiary level and employers in key industries were done. These provide insights into the rationale for the introduction of the CXC examinations and their strengths and weaknesses; the extent to which students are prepared for higher education and the working world, through pursuing these examinations, and the future direction of CXC. A questionnaire was administered to a small group of teachers at the secondary school level, who have sat and taught both CXC and GCE exams, to garner their comparative view of the content, assessment procedures, effects on students and overall effectiveness of the examinations. Secondary analysis of syllabuses and reports on the examinations by CXC and other stakeholders were undertaken, primarily to evaluate the nature of the content, objectives and the extent to which these are met and prepare students to be national and global citizens. Census data of the results of students' performance on the examinations will provide quantitative tests of the level of success that both examinations have enjoyed.

The interviews and secondary analysis preceded the survey of teachers' opinions. The later data collection methods were informed by what was unearthed from the interviews and the secondary analysis.

Organization of the thesis

This introduction is followed by the literature review and theoretical underpinnings of the research by highlighting issues surrounding the role, purpose and value of education and the changing concepts of education over the years. Problems, policies and pressures that impact on education systems and values inherent in education are explored. Trends in education systems both in the developed world and in small states are analysed and followed by an examination of CXC, which focuses on its establishment, strengths and weaknesses, accomplishments and promises for the future. An overview of the development of secondary education in Jamaica follows. The Jamaican education system, from the

pre-emancipation era to the present, has been impacted by colonialism, nationalism and globalization. The CXC was conceived in the nationalistic era, which saw an increase in patriotism and a move towards regionalism and the development of a Caribbean identity. However, the legacy of the colonial era may have negatively impacted the efforts of the Council and if so, attempts to erase the entrenched polarization that colonialism fostered may have proven futile due to the internal and external pressures with which the nation wrestles.

Additionally, this research will highlight how globalization and its concurrent demands on workers have given rise to other challenges relating to educational content and focus, that the government must address notwithstanding the terminal assessment provided through CXC. The pressures and policies - internal and external - that influence the education system are analyzed. This is followed by details of the methodology used in conducting this research. The penultimate chapter presents and analyses the data and the final chapter summarizes, concludes, details the implications of the research and presents recommendations.

CHAPTER TWO

POLICIES, PROBLEMS AND PRESSURES SHAPING THE DEVELOPMENT OF EDUCATION SYSTEMS IN SMALL STATES

Introduction

This chapter provides a context for assessing education system change in small states and, in particular, the reform of examination arrangements. Traditionally, education has been used to advance social, economic, cultural and political goals. The value imbued in a nation's education system is directly proportional to the perspective from which the social and political leaders view education and its potential. In this specific context of postcolonial societies, these perspectives are shaped by local social and external global trends. Chapter 2 sets the framework that underpins this study: a postcolonial theory of education. This framework questions standard academic and policy approaches used to assess the values of secondary education; it critiques the aspirations and failures evident in indigenous education in small states as they cater to national demands and seek to respond to global trends. This chapter thus contextualizes the general debate among functionalists and their critics, which justify the roles and functions of education and examination, and examines the policies, pressures and problems that shape the development of education in small states.

Debates about the role/function of education

Education systems ensure transmission of attitudes, values, skills and sensibilities; thus they facilitate enculturation and socialization (McCulloch & Richardson, 2000). Hence, there is a complex link among educational institutions, employment patterns and political considerations. Invariably, curricula are designed to ensure that students acquire knowledge that is applicable to various contexts, while maintaining the status quo and preserving society's interests, values and mores. Nevertheless, in light of modern global trends and the change to a market-driven economy, which relies heavily on technological devices and the information

industries, many societies have revisited and implemented changes in their education systems to equip their citizens with fundamental, interpersonal and problem-solving skills and abilities to function effectively in the twenty-first century (Young, 1998; Smith, 2002; Hodgson & Spours, 2014; Yates & Young 2010; Eng, 2015; Young & Muller 2010; Young 2011; UNESCO, 2005). Despite differences in curricula, education models and school systems, those who argue for the positive functions of education insist that there are some functions that education perennially plays: the personal, social and moral education of children; promotion of civil peace and social cohesion; and securing balance among moral, academic and vocational education.

There are varied social and economic benefits of investing in secondary education; social changes are effected at various levels: improved individual earnings, economic growth, and improvement in environmental and social conditions. Additionally, education fosters social equity, helps to promote democracy and civility and builds better communities. Education helps to lower crime, improve public health, parenting, the environment, participation and social cohesion (Yates & Young, 2010; Healy, 1988; Mingat & Tang 1996; Harber, 1999; UNESCO, 2005; Noddings, 2015; Young 2011).

Education also plays a key role in maintaining national identity. Tate (2000), then chief adviser on the National Curriculum of England, affirmed that the curriculum included valuable cultural and historical information that should be transmitted to the nation's future. The key role of the curriculum, Tate maintains, is developing citizens' identity through exposure to the country's diverse culture and politics.

Scholars who support the positive functions of education affirm that education plays a role in development (Yates & Young, 2010; Shriewer & Holmes, 1988; Bray, 1990; Ng & Feldman, 2009; Becker, 2009) and helps the economy to meet business and industry needs, emphasizes traditional values and workplace norms and dispositions and ensures society's economic growth and development (Apple, 1990; Kellaghan, 2004; Aldrich, 1998; Worsley, 1987). Having studied the value of education, Mingat and Tang (1996, p. 9) found like previous researchers, that "... initial levels of investment in education affect subsequent economic growth." (See also Lisle,

Seecharan & Ayodike, 2010; Almenadarez, 2011; Noddings, 2015; Levin, 2015; European Commission (EU), 2011). Thus nations invest in education because it yields profits, which translate into national growth and productivity (Olaniyan & Okemakinde, 2008; Vinod & Kaushik, 2007). These are universal claims that inform education policy in most states. However, some small postcolonial states because of the legacy of colonialism, have exceptional concerns in achieving these aims since, unlike other nation states, they have to contend with the basic requirements of effective state formation and nation building, local nationalism, decolonization and globalization.

State formation and nation-building

One of the traditional functions of education was state formation - to develop nationalistic sentiments (Aldrich & White, 1998). Such education systems focused on culture, achievements, origins, laws, customs and social mores to ensure a disciplined, loyal workforce. Civic identity and national consciousness were engendered and subjects became loyal state adherents after attending school (Green, 1997). Another role of education is fostering national unity and facilitating state control. Those who are educated to the highest levels stand better chances of being incorporated among the power brokers of society. In some developing countries, the education system is built to select the elite leaders, yet education is seminal to national development, ensuring liberation from foreign domination (Brock, 1982; EU, 2011). State formation is premised on a universal idea of development, necessary both for competing with other states, and decolonising. There are tensions, problems, pressures and contradictions in these twin demands on education in postcolonial states, as the remainder of this chapter will show.

Eckstein and Noah (1993), critiqued the functions of education and examination systems and affirmed that examinations are control agents to assess teachers' effectiveness and consolidate the nation state; they act as quality control measures of students' learning, and student selection. There is a strong link between education and examinations. The culmination of students' academic life, normally involves examinations that serve varied purposes: attainment, diagnosis,

prediction, motivation and selection (Green & Preston, 2006). As a form of summative evaluation, one of the chief functions of examinations is preparing students for further studies, thus forging linkages between schools and universities (Cummings, 1990; Newton, 2007; Noddings, 2015). Students who are successful in examinations view this as a tool for self-improvement because social progress and recognition are assured via success in examinations. By extension, national strength is guaranteed, as successful candidates will contribute to nation-building. This view is now challenged as globalization and the information driven economy have changed the role that education plays in development (Brown, Lauder & Ashton, 2011; Hodgson & Spours, 2014).

Small states are pressured to ensure that their education systems and examinations are accepted by the international universities where their graduates pursue tertiary studies. Thus, some small states use established international examinations at the secondary level, which determine curricula, sometimes to the detriment of national and postcolonial goals (Fergus, 1987; Pillay & Elliott, 2005; Smith, 2000; Yates & Young, 2010). The emphasis on summative international examinations is linked to their certification, which confers prestige and international credibility. Despite the inherent 'international standard' and 'marketability', many small states, like the Caribbean did in the late 1970s with CXC, are moving towards localizing examinations, as the curriculum taught to take the international examinations, in many cases, is irrelevant to the needs of the society. The emphasis on intellectual versus practical knowledge undermines national development and progress (Fergus, 1987, p. 75; UNESCO, 2005; Pillay & Elliott, 2005; Kellaghan, 2004; Levin 2015; Noddings, 2015).

Another criticism from those who argue about the control function of education is that in small states, curricula and by extension examinations, are generally too academic with inadequate focus on technical and vocational training. Worldwide, attempts are being made to make curricula more relevant to the working world and equip graduates with skills that guarantee future success (Fergus, 1991; Carnoy, 1999; Yeh, 2008; Young 2008; Isaacs, 2010). It is necessary to shift the focus of schools to meet employers' needs, as the skills and knowledge needed outside of school are not measured in the tests being done (Yeh, 2008). Young

(2008) made a case for the acquisition of powerful knowledge by students to ensure their effectiveness as change agents in society.

Bacchus and Brock (1987), criticising education's control function, posit that education helps to maintain cultural dependency. This obtained in colonies, like Jamaica, where local systems were fostered and controlled by the imperial power. To reinvent themselves, education systems of small postcolonial states must play a role to prevent cultural penetration and promote "critical independent thought and confidence in indigenous patterns and practices" (Miller 1987a, p. 138). Consequently, in post-colonial societies, if true independence is to be achieved, fundamental curriculum reform must redress the balance between international and local components of culture. Postcolonial societies, therefore, try to establish their own curricula and examinations to sever colonial ties and promote indigenous cultures. Thus, writing their own stories instead of embracing that presented through the eyes of the colonizer.

There is an inextricable link among state formation, citizen formation, skills formation and national economic development (Claasen, 1999). However, critics of education's function maintain that despite the inherent relationship among levels of education, productivity and economic growth, improved education does not always lead to economic growth (Brown, Lauder & Ashton, 2011). Consequently, some people who achieve the highest levels of educational qualifications are still poorly paid. It is the quality of education and training that will determine society's division of labour, economic diversification and success.

Thomas (1990), supporting the positive benefits of education, suggests that the main role of education is to graduate good, knowledgeable problem solvers. Education should prepare skilled communicators; promote individuals' physical and mental health; develop faithful supporters of the society; produce efficient workers; and equip individuals to realize their self-selected destinies. This writer argues that the function and role of education need to be redefined and life skills taught should include analytical problem-solving, creativity, flexibility, mobility and entrepreneurship for global competitiveness.

Another function of education is to foster national growth and development. Recent advancements in the technological era have fostered

the evolution to a knowledge-based society, creating high-skill, low-wage workers, resulting in the narrowing of boundaries and a change in the value of education. Brown and Lauder (1995) and Brown, Lauder & Ashton (2011) affirm that in the globalized economy, nation states have to reengineer their education systems to compete effectively in the 'global auction'. This suggests that globalization has orchestrated changes in education's roles; now there is an emphasis on skills formation, knowledge acquisition and upgrading of credentials to compete internationally (Brown, Lauder & Ashton 2011; Bray, 1990; Kellaghan & Greaney, 2001; Young, 1998; Young & Muller, 2010; Burchell, 1992; Isaacs, 2010). To meet the demands of globalization, the job market offers incentives for workers to upgrade their skills and education. However, as more developing nations and the 'Asian Tigers' ensure that they upgrade the skills and knowledge of their workers, boundaries are narrowed and blurred and now the guarantees formerly inherent in a university degree, between learning and earning, are no more (Brown, Lauder & Ashton, 2011).

To ensure progress, education must prepare multi-skilled workers with initiative who can contribute to decision-making and be effective workers. Another change resulting from globalization is that educators must now integrate their approach to ensure that graduates are appropriately prepared for both the marketplace and continuing education (Eng, 2015; Joyce, 2008; Hodgson & Spours, 2014).

In developing countries during the 1960s, education was seen "as a means of narrowing the gulf separating them from the advanced countries" (D'Aeth, 1975, p. 15). This suggests that education should ensure society's transformation; but various factors, including lack of strong leadership and inadequate resources, impeded progress. By the late 1970s, western governments began to reconsider education's role, viewing it as a major budgetary cost and an inhibitor to economic growth (Worsley, 1987). Various theories of education's role have been advanced, but they do not always reflect the reality of small developing states like Jamaica. In fact, developing nations are, in many cases, playing catch up with the developed world.

Secondary education helps to develop critical thinking skills and helps individuals to make informed life decisions. This key role of education helps to produce knowledgeable citizens who exercise their rights and responsibilities. This is important in a democracy where shared norms, trust, social networks and community participation are desirable (Harber, 1999; Noddings, 2015; Young, 2008; UNESCO, 2005). Sociologists posit that educated citizens are more likely to be spiritually and morally aware, join community organizations, become involved in politics, and engage in free speech (Murray & Gbedemah, 1983). The reduction of ignorance and increased earning capacity that are achieved through secondary education can also help to reduce criminal activities and imprisonment (World Bank, 2005).

A profound role of education is to facilitate development, which usually leads to modernization and social change. Patel (1984) observes that in developing countries education not only conserves, integrates and perpetuates culture, but also innovates and promotes change, thus facilitating modernization. It is the educators' role to help pupils to see education's potential to fulfil their needs and aspirations and improve the quality of their lives and their society. Educated citizens will help to usher their societies into the modern era through creating new knowledge, experimenting with and inventing procedures, machinery and equipment that will facilitate progress (Young, 2013; Raffe, 2003; Hodgson & Spours, 2014). Without the requisite skills and abilities, graduates will be unable to contribute to modernization and nation states will remain stagnant while those states that invested in education will enjoy progress.

To support the view that education plays a role in development, Schriewer and Holmes (1988) report on a study done on 72 nations. They observed: "Zero-order correlations reveal that level of development is very strongly associated with education measures" (p. 181). A country with an educated labour force will do better economically than one without. Bray (1990) reported on a study, conducted by Denison in 1962, into factors that contribute to Gross National Product (GNP) of the United States of America between 1910 and 1960. He found improvements in the quality of the labour force resulting from increased education. Cummings (1990) and Murray Thomas, citing Woodhall (1985), concurred noting that education is

linked to productivity and success of national economies. See also Olaniya & Okemakinde, 2008; Almendarez, 2011; Vinod & Kaushik, 2007; Levin, 2015, and Young, 2013.

The core demands of education in the postcolonial context are to decolonize and achieve economic and social stability. This means authenticating and legitimizing national and regional affiliations. It also means pooling resources to build capacity. Miller (1987a, p. 132), supporting the positive functions of education, in looking at the Caribbean, suggests that education "...must play the role of social broker in nation building"; regional interdependence is recommended as no Caribbean country can be self-sufficient in this global environment. Thus education must help to move the culture from being disaggregated to being coherent. Education should promote values and views that are "... authenticated by and derived from Caribbean experiences and realities" (ibid, p. 138). These were some of the drivers behind the establishment of the CXC. Importantly, Miller (1987a), like Marxists and Post Colonialists, recommends that education should ensure the empowerment of society's marginalized groups.

Education as political tool

Critics who argue about the control functions of education aver that it is used to gain political mileage. In some instances, as is the case in Jamaica, political candidates use educational reform as part of their agenda to win votes. They promise free education, payment of tuition fees, to provide textbooks, more schools and materials as part of their political manifesto. For most politicians, education is important to prepare students for adult life and to contribute to nation building (White, 1998; Petgrave, 2011). However, politicians often use their influence and power to change the aim of education as it suits their policies, without altering the curriculum. Thus they sometimes impact students' development in a negative way (Aldrich, 1988; Isaacs, 2010). Various factors influence a government's choice of curricula and the structuring of education systems (Young, 1998; Isaacs, 2010; Hodgson & Spours, 2015). In Jamaica and other postcolonial societies, changes in

socioeconomic conditions, philosophy of leaders and changes in political systems all impact education.

Education should play a role in ensuring improved quality of life and a better standard of living. Politicians should implement education policies to help people to overcome ignorance and acquire skills in order to achieve these desired aims. These skills are necessary to support greater participation in development and progress, social inclusion, modernization and economic growth and to provide an adequate supply of professional expertise needed to run a modern nation (Young, 2011; 2013).

On the other hand, critics of education view educators as agents of the state, who perpetuate mandated political ideology. Thus schools play a covert role and help to entrench the social order ensuring control, through emphasizing some concepts and excluding or downplaying others (Apple, 1990). Schools act as agents of selective tradition and cultural incorporation. Various writers including Bowles and Gintis (1976) advocate that education reflects society and is not a force for social change. They, like Marxists, theorize that if social change is required, then society's economic structure has to be changed from within. This suggests that educators are powerless as change agents without a mandate from the political directorate. However, leaders' intentions are not always achieved – people change because of and despite the education they receive.

Notwithstanding negative perceptions, as posited by Marxists and Post colonialists, education plays a role as an agent of liberation (Harber, 1999), providing students with the means of freeing themselves from ignorance, economic, social and political bondage. Yet Harber (1999, p. 57) cites Freire who posited that schools are part of the "culture of silence"; pupils are taught to accept everything in an "unquestioning and unthinking manner." However, education should do otherwise; it should "...raise critical consciousness so that learners both understand their social reality and act upon it" (ibid.). Simon (1988) concurred noting that Neo Marxists and sociologists see education as a means of perpetuating the status quo. However, education can be a vital force in securing social change. Young, (2011, p. 149) maintains, "...even the most oppressive school systems can be used by some as instruments of emancipation." Student uprisings in Europe and the USA in the early 1970s are proof of the power of education to effect unintended outcomes (Simon,

1988). Notwithstanding this, Simon (1988, p. 16) maintained that “... education can do nothing of any significance; that it must inevitably reflect the society which creates it ... its function is that of ensuring social reproduction.”

Summary

Undoubtedly, education plays diverse roles and functions: economic, social, developmental and political; it helps to develop socially aware, democratic citizens who contribute to nation building, progress and development. Despite negative perceptions about the controlling function of education, it prepares workers for the global market and facilitates lifelong learning among workers who play seminal roles in the economic success of nation states. Arguably, workplace requirements have changed and the economic value of education is now in question; however, education can also be used as a tool for cultural and social change. The educated citizen is better able to mediate his reality, enjoy a better standard of life and contribute to society's development and success. In light of these roles that education must play, the education system and examinations process must reflect and foster the desired outcomes. Thus, as this thesis proposes to do, it is important to examine the CXC to assess the extent to which these roles are emphasized in and promoted by the curricula and examinations that the Council maintains are suitable to prepare graduates for Caribbean development and the global market.

Policies, pressures and problems that determine curricula in small states

There are diverse interrelated policies, pressures and problems that determine curricula in small states. Organizations establish policies and apply pressure on small states and consequently various problems emerge. Globalization, the policies of international agencies, the political agenda of the day, allocation of government funds for education, and the comparability of education qualifications with international students are a few of the policies, pressures and problems that impact curricula and examinations in small states. This section seeks to examine these variables and their impact on both developed countries and small states. It is

argued that globalization poses additional challenges to functionalist secondary educational policy in small states. This calls for different theoretical tools, presented in Chapter Five.

Globalization - blessing or curse?

Globalization, the world system that incorporates social, political, cultural and economic dimensions of nations, demands that society be borderless, inter-related, interconnected and interdependent (Nayak, 2011; Lunga, 2008; Dirlik, 1994; UN, 2010). Although the policies of globalization are loosely defined, due to the economic emphasis and the nature of the global market, there are several implications for education. The demands of globalization pose problems for and put pressure on governments and education systems of small states. Globalization heralded the passing of the industrialized era and saw mass production giving way to 'flexible specialization'. Occupational specialization and the separation of mental and manual labour are no longer promoted. Globalization is purported to benefit all and is the route to development. Yet questions about equity and justice, national and global emphases must be asked. Globalization entrenches dependence on dominant developed states. From a postcolonial perspective, this is neo-colonialism, neo-imperialism, preserving the center-periphery divide in which value is determined at the centre (Rizva, Lingard, & Lavia 2006; Lunga, 2008; Dirlik, 1994). Small states, despite the requirements of nation building on nationalist, de-colonialist terms, must also meet the demands of globalization and produce competitive citizens.

Globalization is hinged to the information communication (infocom) technologies developed in centre states. Technology is the hub, the driving force behind globalisation (Claassen, 1999; Nherera, 2000; Szeman, 2006). Technology has ensured that the world is connected and is literally at our fingertips; trade and finance are accelerated; nations can trade in real time with others half way across the world (Szeman, 2006; Dirlik, 1994). The technologies will continue to ensure economic, cultural and social changes. However, due to the transient nature of information and rapid changes in the technologies that are utilized to facilitate

global trade, workers must be willing to engage in lifelong learning to be effective (Hodgson & Spours, 2012; Grainger, Hodgson, Isaacs, & Spours, 2012; Ozga, 2011).

Globalization has changed the face of the workplace and this has influenced people's demand for and involvement in varied educational programmes. Kellaghan and Greaney averred that due to globalization, "...knowledge is a key strategic resource ... and ... the availability of human resources is critical in determining the rate of economic development" (2001, p. 95).

In the developed world, changes in the global economy led to a reduction in the need for unskilled and semi-skilled workers and demanded highly-skilled, more flexible and adaptable workers who possess technological and portable knowledge and skills. Only few multinationals, mainly in the service sector, require workers with little prior training. Additionally, globalization requires workers who are not culture bound, who can mediate spatial and chronological boundaries.

Effects of globalization on education

The effects of globalization on education include student exchanges, internationalization of qualifications, increase in distance education, multicultural curricular and universal standards for vocational training (Classen, 1999; Hodgson & Spours, 2015; Ozga, 2011). Schooling will now help to prepare standards for vocational training and life in the global economy. Globalization drives education systems at various levels as nations comprehend education's role in engendering requisite skills and knowledge (Bacchus, 2005). Since globalization facilitates international interaction of businesses and thus poses challenges for education systems, educators must prepare students to work in the global marketplace. Consequently, there has to be a shift in educational focus from a narrow national emphasis to a global one to ensure economic success. Job skills are also portable and people are gravitating to worldwide job opportunities. It means that curricula must equip citizens to function effectively wherever they seek employment.

Changes created by the *infocom* technologies that drive globalization impact education, and education systems are pressured to incorporate them to benefit students. Knowledge is now being transferred across borders technologically and is considered as a key factor in economic development. Through existing technologies,

many colleges and universities offer online and distance courses to which many students subscribe. Students confer and exchange knowledge with others across the world. Curricula must be delocalized and globalized to ensure that the future workforce can function effectively anywhere. Any effective education system must be knowledgeable about and help students to meet the demands of the working world (Claasen, 1999). Contemporary education systems must emphasise continuing education, retraining, lifelong learning, and facilitate the acquisition of multi-skills which are required globally (Pretorius, 1999; Reese, 1985; Crossley, 1999; Little, 2000; Claasen, 1999; Hodgson & Spours, 2015; Ozga, 2011).

Kellaghan and Greaney (2001) propose that in our globalized society, the purpose of education is “winning the global competition.” Education and training are critical for economic advancement and increased productivity, which will lead to reduced poverty and improved standard of living. (See Appendix 3 for diverse lists of skills that global economies require.) Many education systems which focus on the core, academic curriculum, seem to fall short of equipping graduates with the skills and abilities that globalization require (Kellaghan & Greaney 2001; Hodgson & Spours, 2014, 2015; Ozga, 2011; Eng, 2015).

Green (2002, pp. 17-18) notes that globalization “... raises the demand for skills and qualifications” and leads nations to embark on lifelong learning to meet the demand. Increased commitment or emphasis on life-long learning has seen changes in educational programmes and modes of delivery (Thomas, 1990). The latter facilitated by technology. The European Commission is endeavouring to create a knowledge economy through life-long learning (Green, 2002; Young, 1998). Any country that wants to be competitive economically, should embrace a lifelong learning focus.

Education systems have to promote knowledge and skills and meet society’s demands. Global changes require changes in education and training to prepare citizens to make valuable, worthwhile contributions. Technological advances in communication and globalization extend to knowledge and ideas. Schools and educational institutions in industrialized countries are at a distinct advantage and are able to access and benefit from technology while some schools in the developing world cannot (Nherera, 2000). Questions about unequal power and economics beg

to be addressed (Lunga, 2008). It is the job of the school to open vision and widen perspectives. Small states are challenged to use technology to improve education and bridge the digital divide making knowledge available to people globally. In doing so, education must play a counter-hegemonic role to help post-colonial peoples to interrogate, understand, resist and replace the hold that the neo-colonial ideological powers has over them. They must rewrite the narrative of their existence as the other; natives must reject the multi-culturalism which globalization fosters and encourages if it is at the expense of indigenous cultural identity resulting in fragmentation (Rizvi, Lingard & Lavia 2006; Dirlik, 1994).

In order to function effectively, the focus of many education systems, including those that have embraced CXC, has evolved to include “the promise and peril of globalization”, economic competitiveness and economic development (Jules, 2008, p. 204). Nherera, who concurred with Green (1997) and Crossley (2008), posited that, “Computer technology has arguably had greater impact across the globe than any other phenomenon during the last century” (2000, p. 337). He affirmed that the Information Communication Revolution has transformed education creating numerous global possibilities. The work-based route features prominently in European education and is also true in small states like Jamaica where many employees are accessing distance programmes and are pursuing online courses with universities in North America and Europe.

The changes being enacted across the world seem to be geared mainly at combating the effects of or competing in a market driven by globalization. The internationalization of education is the modern trend resulting from globalization (Green, 1997; Yates & Young, 2010; Smith, 2002; Hodgson & Spours, 2015; Ozga, 2011; UN, 2010). Due to information technology, new possibilities for the delivery and content of education exist resulting in education’s deinstitutionalization.

Implications of globalization for small states

There are varied definitions of smallness which can be viewed in both qualitative and quantitative terms. Smallness is a relative concept and is often linked to size, population, geographical area and Gross Domestic Product per capita. Some countries, like Jamaica, that are categorized as small states have large area and

population but possess the other characteristics of smallness (Buddan, 2001; Lee & Smith, 2010; Badducchino, 2012 citing Nugent, 2006.) Issues of power, self-image and influence in relation to the external environment also impact smallness. Most small states are developing countries with limited capabilities, interests, and resources; they are economically and environmentally vulnerable. They are the weaker parties in international relationships (Gerger, n.d.; Buddan, 2001). Thomas & Pang (2007), and Buddan, (2001) further define smallness based on economic under performance, higher costs involved in providing goods and services, geographic isolation, high costs for trading and subjection to economic volatility due to natural disasters. Despite Jamaica's population, these indices of smallness are evident and thus her categorization as a small state.

Because of globalization, workers in small states have to be prepared to be flexible, intelligent and skilled (Young, 1998; Pillay & Elliott, 2005; UN, 2010, Levin 2015; Kelleghan, 2004; Ozga, 2011). They must be able to perform a variety of jobs and have initiative to function in diverse cultural business environments. Successful countries are those which have educated workers who can be employed globally (Badducchino, 2012).

However, in the developing world where scarce resources mandate that governments rationalize their spending, they may not be able to invest in the new educational technologies resulting in underdevelopment and economic stagnation. Jules (2008, p. 204) recommends a complete "reinvention of education" in small states, to be timely and relevant to meet the demands of globalization.

Globalization puts pressure on governments and employers to implement changes. Many workers will have to be retrained with new skills including, problem solving, experimentation, creative thinking and collaboration (Claassen, 1999, citing Pretorius, 1999; UN, 2010; UNESCO, 2005; Badducchino, 2012). Thus governments' policies regarding education must change. The rationale is that workers must be prepared to adjust to the changing economic and employment situations that evolve globally. Consequently, governments may view this as a problem, as they cease to control education systems, which have no national but rather regional or global characteristics. This is true for Jamaica and other Caribbean countries, which prepare their students for the regional CXC examinations.

Social institutions and human resources are seminal to meet global challenges and win the economic war. If the quality and productivity of the workforce are improved, there will be success in international commerce. Brown and Lauder (1995, p. 21) affirm that, “Knowledge, learning, information, and technical competence are the new raw materials of international commerce.” This suggests that knowledge is the essence of economic power. Governments world-wide agree and are effecting changes in their education systems (Brown & Lauder, 1995; Pillay & Elliott, 2005; Lee & Smith, 2010). Some subjects are influenced by global trends and are viewed as prerequisites for economic success. Thus governments feel pressured to ensure their inclusion in curricula. This is converted into a problem when funding cannot be procured to provide resources and materials to facilitate these courses.

The nature of business promoted through globalization puts pressure on countries to produce graduates that can function effectively internationally. Thus governments are pressured into and experience problems revamping education systems to produce global graduates. It is through the school system that skills and knowledge required by globalization have to be inculcated into students to fit them for the global market. Information and knowledge will be key requirements to foster integration of workers globally. Developing countries are pressured to invest in and spend more on education to produce a better, skilled labour force, which can attract “globalized finance capital” (Carnoy, 1999, p. 16). The use of technology reduces the need for artisans; yet the new infocom technologies require knowledgeable workers, skilled in various areas, who can multi-task and adapt.

Green (1997) describes the steps taken by developmental nation states to become competitive in the global environment. These states are mainly in the east and include South Korea, Singapore, Taiwan, and Japan. They have all “invested heavily in education” (p. 47). They have planned development with education as the foundation. Moral and social aspects of education are emphasized to shape and inform citizens’ lives and equip them to work effectively globally. The education component is fundamental to global competition, progress and development of these states (Green, 1997; Brown, Lauder & Ashton, 2011; Lee & Smith, 2010).

Graduates are therefore able to contribute tremendously to national economic success. For these developmental states, the “... primary motivation behind educational development lies in the drive towards achieving national identity and cohesion (Green, 1997, p. 50). On the contrary, in European countries, education is being positioned as the major vehicle for economic growth. The forging of a unified, heterogeneous identity could also result from the new emphases as educators tailor instructions to instil in their pupils European values and attitudes through focusing on European citizenship and responsibility (Brock & Tulasiewicz, 2000; UN, 2010).

As in the developed and developmental world, surviving in the global environment is a major concern that drives curricula in small states. Governments are aware that to compete successfully, they have to review and adjust curricula to keep abreast of contemporary practices and ensure renewal of workforce knowledge (Dhanarajan, 2000; Pillay & Elliott, 2005; UN, 2010; Badducchino, 2012). The illiteracy that pervades developing countries is a problem, which will have to be tackled for nations to be successful. Macdonald (2001), championing the cause for life-long learning and advocating a new look at education systems, details the features of the global environment in which graduates will have to function. In this new world, continuing education, skills upgrading and technological knowledge are crucial.

Many small states have to change or adapt their curricula to become competitive. In recent years, there has been a shift in the focus/emphasis from cultural and social education to scientific and technological subjects in an effort to adequately prepare students (Dove, 1980; Macdonald, 2001). Arguably, isolation and size are no longer deterrents as technology bridges these gaps and facilitates knowledge acquisition and competition (Badducchino, 2012).

However, the problem inherent in this scenario is that while this might help to ensure that some students in small states access education, it can also mean that poor nations will be at a greater disadvantage (Macdonald, 2001). Despite the opportunities available via globalization, small states are suffering. Efforts to integrate them have not all been successful nor have they benefited the majority of the population. The inequality gaps between developed and developing nations is

widened and deepened by globalization (Lunga, 2008). Small states have to ensure that they benefit from globalization through educating their people and equipping them with the requisite skills and knowledge. They must also embrace opportunities for retraining and qualifications improvements to be marketable (Nherera, 2000; Eng, 2015; Joyce, 2008; Hodgson & Spours, 2014). Small states have a mammoth task as they are under pressure to make students achieve their full potential and requisite competencies to remain competitive in the global economy, securing better jobs and lives.

Modern trends in educational reforms see schools improving the quality of their graduates to provide suitable labour for a global market. Carnoy posits that, “Because knowledge is the most highly valued commodity in the global economy, nations have little choice but to increase their investment in education” (1999, p. 82). It is imperative then that small states act accordingly so that their graduates are equipped to function globally. However, sometimes efforts to provide qualifications that are acceptable globally are impacted by international agencies which present problems for small states like Jamaica.

The influence of international agencies

International trade and financial agencies and influential nation states regarded as neo-colonial agents impact and dominate education systems in small states (Jules, 2008; Bacchus, 2005; Crossley, 2008; Ashcroft, Griffiths & Tiffin 1989; Beneviste, 2006; Rose, 2006; Rizvi, Lingard & Lavia 2006; Atchoaréna, Da Graça & Marquez, 2008; Abrokwa, 1995; UN, 2010; Golub, 2013). Organizations such as the World Bank, IDB, UNESCO, OECD, the United Nations, USAID, and the WTO wield immense power and dictate, directly or indirectly, education trends, plans and policies in small states. In fact it is argued that, in some cases, the internationalization of education has removed educational policies and execution from the hands of the nation state into the realm of these influential organizations (Bacchus, 2008; Jules, 2008; Bieber & Martens, 2011; Rogers, 2014; Sellar & Lingard, 2014). When small states embrace international development policies and goals such as Education for All (EFA) or the Millennium Development Goals, “their own

development priorities have often been subsumed, overlooked or ignored” (Crossley, 2008, p. 247; UN, 2010; Golub, 2013; Abrokwa, 1995).

Additionally, multilateral and bilateral agencies have been playing a major part in assessment and comparison of educational outputs across nations. The OECD, through its Programme for International Student Assessment, (PISA) is one such organization which dictates how nations should organize and improve their education systems (Yates & Young, 2010; Hodgson & Spours, 2015; Isaacs, 2010; Ozga, 2011; UN, 2010). This interest stems from the belief that success in education will ensure the creation of a highly skilled labour force. These agencies view education as the saviour for the individual, the economy and the society (Lauder, Brown, Dillabough & Halsey, 2006; Beneviste, 2006; OECD, 2014; Bieber & Martens, 2011; Rogers, 2014; Sellar & Lingard, 2014; Holford, 2014). To remain competitive internationally, small states are under pressure to ensure suitably qualified workforce. Otherwise, industries will move their activities to countries that have qualified workforce (Bacchus, 2005). This drive has pressured governments to shift attention from controlling content and resources to outcomes to foster global competitiveness. Close examination of a few agencies that have impacted Jamaica will reveal the extent of their power on the education systems in small states.

The United Nations (UN) influences education in small states. Their Millennium Summit, September 2000, gave birth to The UN Millennium Declaration, which saw 1,500 world leaders agreeing to the Millennium Development Goals 2015. The chief aim of this policy is to reduce extreme poverty; one of the agents to accomplish this is education. The World Education Forum 2000 also saw an amalgam of international organizations embracing the EFA policy. Additionally, the Dakar Framework for Action holds that education is a fundamental human right (UNESCO, 2000e). Education’s role in preventing conflict, building lasting peace and stability, and fostering development are promoted. World leaders pledged to increase funds allocated to EFA and increase financial aid to countries committed to education. The power that these agencies wield helps to ensure, through policy stipulation, that education is given priority treatment in the small states to which they offer loans or grants.

The World Declaration on EFA stresses basic learning needs for students to ensure the improvement of their full capacities to contribute positively to development. Many developing countries are not meeting the EFA goals. Nevertheless, education is central to development and multinationals insist that stakeholders accord it priority treatment. Additionally, the fact that most countries worldwide have ratified the UN Convention on the Rights of the Child means that they are obliged to ensure that basic education is available to all. The OECD (2014), and UNESCO (2000e) concur with the World Bank and the Interamerican Development Bank (IDB) and all aver that the correlation between education and poverty is powerful; thus they all insist that successful education programmes enrich students' lives and prepare them for the real world. Consequently, there are international tests which seek to determine students' skills and levels of performance and league tables are published to evaluate "the quality, equity and efficiency of school systems" (OECD, 2014, p. 2).

The policies of several international agencies, for example the World Bank and the IDB are linked to their belief that education can help to eradicate poverty and foster economic growth (World Bank, 1999; De Moura Castro, Navarro, Wolff & Carnoy, 2000). In light of global demands, the IDB holds that education may be the Caribbean and Latin American region's most critical issue. The World Bank maintains that their mission is to fight poverty, raise the standard of living, ensure sustainable development, improve welfare and the quality of life and provide opportunities for all (World Bank, 2007). The Bank has access to countries' finance personnel and decision-makers and they make requirements for education compulsory conditions for loans. Loans are tied to economic and political conditions and donors dictate how funds are to be allocated (Abrokwa, 1995; UN, 2010). Like the IDB that supports primary and secondary education, the World Bank sees secondary education as a necessary part of basic education to improve values, attitudes and skills, to enable graduates to become active and productive citizens not just for preparation for tertiary education but also for transformation (World Bank, 2005; UN, 2010; Golub, 2013). Thus, as part of their lending policy, they require governments to ensure that graduates acquire the essential skills to survive globally, benefit from social development and enjoy diverse human experiences. However, Crossley citing Louisy

(2001) notes that the Caribbean's "... continued dependence on external financing for its development projects further strengthens the control of the development agencies ... making it extremely difficult to bring its own perspective to policy decisions taken on its behalf" (2008, p. 248).

The World Bank puts pressure on borrowing countries to ensure that skills acquisition and competency-based learning are being emphasized in curriculum reform which they fund (World Bank, 2005). The Bank endorsed EFA and pledged to help nations reach the targets. Both the World Bank and the IDB have shifted their funding to management and pedagogy. These policy shifts are evident in their relationship with Jamaica, which has undergone changes in administration, teacher training and general management of the education sector.

As a development agency, the Bank introduces stabilization projects as part of their policy to help revive declining economies. Structural adjustment programmes with conditionalities are created for countries accessing IMF and World Bank loans (Bacchus, 2005; Abrokwa, 1995; UN, 2010). These conditionalities put pressure on governments to structure their budgets according to the dictates of the Bank. This often results in problems for the nations as many social services have to be curtailed or reduced to meet the conditions established. Jamaica, as part of their IMF agreement in the 1970s and 80s was required to embrace conditionalities that resulted in cuts to their budget which impacted negatively on the education sector (Golub, 2013). Despite the Bank's avowed interest in fostering education to aid poverty reduction among developing nations, Rose's examination of "The Influence of International Agencies on Education Policy and Practice in Malawi" paints a different picture. She insisted that the World Bank dominates development practices and impose "policy prescriptions" which are sometimes deleterious to borrowing countries (2006). Nevertheless, the Bank insists that investments in education facilitate development (World Bank, 1999, p. 6; p. 1023).

Thus the Bank and other international agencies continue to embrace policies which put pressure on and result in problems for the education systems of borrowing countries. Their concepts of the value, role and power of education determine their lending and funding policies; therefore, sometimes activities to reform education systems are conditionalities that accompany their assistance to

small states which are exposed and susceptible to external influences (Bass & Dalal-Clayton, 1995). The agenda behind the agencies' loan and grant policies has to be embraced by small states that require loans and accept grants (Crossley 2008; Abrokwa, 1995; Golub, 2013). Indeed Jules (2008, p. 206) citing Jules (2006) affirmed,

It takes an exceptionally strong political will at the national level to establish an educational agenda that does not converge with or replicate the dominant paradigm and an even greater strength to say no to funding that would result in a deviation from the national agenda.

Since the major donor agencies have embraced the seminal role of education in effecting sustainable development and providing suitable global workers, small states are compelled by the conditionalities attached to loans and gifts, to improve their education system. Jamaica, as beneficiary, has also been compelled to examine and reform secondary education. International debt burdens and conditionalities attached to agreements dictate how public funding is allocated. However, despite the external pressures, it is not only international agencies, transnationals and multinationals that dictate how countries develop their education systems, but also the existing national political agendas.

The political agenda of the day

Governments' political agenda and their policies also put pressure on and create problems for education systems (Hodgson & Spours, 2015; Ozga, 2011; Isaacs, 2010). The creation of the European Union and the demands of the union upon its members, have led to various curriculum changes. One of the key commissions requires education and training for its member states. As a result, special provisions are made to fund vocational training and emphasis is put on providing education that will create skilled people who are knowledgeable about and will care for their

society, ensuring the strengthening of the economic base, creation and sustainability of the 'new Europe'. An interdisciplinary approach to education which combines vocational and academic training is advocated. The close links between economic and educational activities reinforce the view that education is being used as an economic facilitator (Isaacs, 2010; Hodgson & Spours, 2012; European Commission, 2011).

Small states are also pressured by the political ideology of the day. In the post independence era, many small states, Jamaica included, focused on using education as a tool for national development. Lindsay (1990) reported, for example, that Kenya and Tanzania planned to harness education as a vehicle to achieve self-reliance to help to drive national development, as in Jamaica. In many cases, there were problems associated with the changes as many small states were unable or unwilling to change inherited education systems although the systems were, generally, inappropriate and irrelevant to the needs of the societies (Golub, 2013). Inherited colonial systems separated students from their reality resulting in "disruption of indigenous societies, without the encouragement of new social relationships and loyalties" (D'Aeth, 1975, p.2).

After achieving independence, many small states spent much on education because it was viewed as "...a vital contributor to economic growth and to the expression of political ideas about the form society should take" (ibid.). Speaking about the South Pacific, Rees (1985, p. 72) noted that, "The development of a nation's own education certificates was seen to be as proper as hoisting a new flag or issuing a new national passport." It is a symbol of independence from colonial rulers. From a postcolonial perspective, it is akin to writing their own narrative, rejecting the story imposed on them by their former masters from the center.

In Jamaica, the 1950s to 1960s saw reforms in education that were significant departures from what obtained in the first half of the twentieth century. Then, education was being used to advance imperialistic ends and to satisfy the local plantocracy. The notions of nation-state and nationalism and the need to redefine and establish the Jamaican society in keeping with this political ideology, drove educational reforms. With the onset of independence, the policies shifted; democracy or self-government would require citizens who were skilled, informed

and knowledgeable about their society. The education system would infuse democratic concepts such as adult suffrage, and responsible government thus contributing to nation building. In that era, the key themes were “nation building, expanding access, equality of opportunity and nationalism or regionalism” (Miller 1999b, p. 200). The major resulting problem was finding funding for the new policies (Abrokwa, 1995; Golub, 2013).

Allocation of government funds for education

The policies adopted by governments whether because of agreements with international lending agencies or local budgetary constraints put pressure on and create problems for education systems in small states. Indeed, poverty prevents some nations from establishing their own curricula, so they use inherited or imported ones (Noah & Eckstein, 1988; Abrokwa, 1995; Golub, 2013).

Notwithstanding this, some states have broken the stranglehold of dependency and have renounced inappropriate, irrelevant models. However, many are constrained because upon establishing their own curricula, they are forced to look to the developed world where wealth is concentrated to get help (Watson, 1982; Lee & Smith, 2010; UN, 2010). Jamaica and other small states continue to accept economic assistance from international donor agencies to fund educational projects. Whereas nothing is inherently wrong with accessing and accepting donations and grants, it is the implementation directives and demands which can impact the local system negatively. Additionally, in some cases when funding ceases, the programmes collapse (Phillips & Ochs, 2004; Reid, 2011; Golub, 2013; Abrokwa, 1995).

In Jamaica, various governments have pledged to spend more on education but due to budgetary constraints, balance of payment on debts, and policies attached to loans and grants, they have had problems servicing the education sector as promised. A UNICEF (2013) report on budget allocation to education for 1997 – 2001 shows a steady decline in the percentage of the budget allocated to education: from 14.8 percent in 1997 to 10.8 percent in 2001. In 2003 the Jamaican government and opposition agreed to increase the budgetary allocation to education from 10 to 15 percent over the next five years. However, in 2004 the allocation was 9.2 percent (Anderson 2004). By 2011, the situation had not

improved; in fact, the Prime Minister announced that the education budget would be cut (*Jamaica Observer*, August 13, 2011). The result is problems for the administrators and educators to produce the required calibre of graduates with inadequate resources. In addition to the problems caused by financial constraints, the historical ties to colonialism have also had a pernicious effect on education systems in small states.

Dependence on former colonial masters

The policies of some practitioners in small states constrain them to depend on their former masters because they benefited from colonial exams and believe that those exams are superior and can ensure the maintenance of their elitist status. Watson (1982) suggests that the inherited education system of small states was designed "... for the selection of an elite to fulfil a leadership role in society" (p. 184). Many leaders are reluctant to effect radical changes to the education system due to their own involvement in the system which facilitated and maintain their political position. These leaders, estranged from their indigenous societies, still prefer and defer to that which originated from the developed world. Additionally, policy makers in small states wanting to remain current, competitive and relevant are reluctant "to develop something significantly different from what is internationally acceptable and which might be regarded as inferior" (ibid., p. 188).

Another factor which contributes to the seeming impossibility to escape dependency is that small states, despite political independence, continue to receive overseas assistance in the form of textbooks, personnel and scholarships (Watson, 1982). Thus, curriculum reforms in small states, "have tended to be adaptations of or the adoption of curriculum developments from the developed countries" (Fergus, 1991, p. 193). In many cases, reform projects are funded by UNESCO/World Bank and are "modelled on their European counterparts ..." (p.193). There is always the possibility that imposed and borrowed policies, adopted wholesale, may not be localized and relevant to the specific needs of the society (Reid, 2011; Phillips & Ochs, 2004; Grainger, Hodgson, Isaacs, & Spours, 2012). Consequently, small states must endeavour, despite their penury, to maintain a sense of self and create indigenous, relevant curricula and materials to foster development.

Fergus (1991) highlighted yet another aspect of this dependency syndrome. Teachers are trained in the former colonial nations and advisors from the developed world are consulted to guide education development in small states. Additionally, external textbooks contribute to dependency. However, with the creation of the CXC there has been a plethora of texts designed specifically for the new curricula, thus limiting this aspect of dependency.

Escaping dependency is a mammoth task for small states. If they succeed, their education systems may be more relevant to their needs. It is necessary though, that they address educational challenges and admit, as Watson (1982, p. 199) suggested, that “many of the problems ... can be blamed on to the colonial heritage and the neo-colonial links – but not all.” Small post-colonial states must make every effort to break the bonds of dependency, be assertive, write their own narratives and direct their destiny.

Curriculum and qualifications in an era of globalisation

The tension between local and international qualifications

Small states struggle with issues of self-determination versus international acceptance to shape their education system. History and the political past of many small states dictate the nature of their curricula and the examinations that their students take. Despite desires to assert independence and establish national identities, economic constraints, “problems of acceptability” lack of “appropriate technical skills and security” and the lure of international recognition restrict the severance of ties with colonial examinations and efforts to embrace local, more relevant ones (Bray, 1998, p. 152; Phillips & Ochs, 2004; Abrowka, 1995).

Small states are challenged because they must balance national goals and external standards to ensure that local qualifications are marketable, despite their limited financial and human resources (Badducchino, 2012; Bray & Steward, 1998). Efforts to establish local education systems and qualifications are usually restrained by the scepticism of employers, tertiary institutions, parents and the general public who are hesitant to embrace local, untested qualification over established international qualification. The case of the CXC in Jamaica is explored in the

following chapter to support this view. In Sri Lanka, for example, the government conceded due to mounting criticism; they had to restore colonial examinations five years after their national examinations replaced Ordinary and Advanced Level exams. Parents felt that their children's chance to study abroad was being stunted and the local qualifications were not recognized in the United Kingdom (Bray & Steward, 1988).

In many cases, as obtains in Jamaica, compromise is achieved through offering both local and international examinations. The former are meant to ensure autonomy, self-determination and control over curricula. These guarantee political leaders the opportunity to align curricula with national aspirations. The international examinations ensure "the perceived respectability and international portability of metropolitan credentials" (Bray, 1998, p. 159). In other cases, changes in the assessment procedures of the British Examinations Boards force some small states to develop their own assessment procedures. This occurred in New Zealand and some South Pacific countries (Bray & Packer, 1993). No doubt, Cambridge's decision to change the GCE to GCSE and the Advanced Levels to A and AS level examinations also influenced some small states to review or revise their curricula and assessment.

The lure of international certification

Small states are concerned about and are anxious to ensure that their citizens are able to compete globally and that their certification can facilitate further education and /or employment. No one wants to be left behind; everyone wants international recognition. Many third world students aspire to gain qualifications from universities in the developed world because they are accorded prestige internationally. Examination bodies, governments and stakeholders should make qualifications comparable and portable, through adherence to international standards thus facilitating learners' mobility (Commonwealth Secretariat, 2000; Grainger, Hodgson, Isaacs, & Spours, 2012; Hodgson & Spours, 2012, 2015; Ozga, 2011; Levin, 2015; Munbodh, 1987; Watson, 1982).

Despite this, Little (1988, p. 17) cautioning care with policy borrowing, stressed the need to create “endogenous models of education and development” and to shun “the importation of inappropriate external models.” See also Reid, 2011; Phillips & Ochs, 2004 and Levin, 2015. Little predicted that “a new form of moderation currently in use by the CXC may well be a forerunner of things to come in England and Wales.” This would be a unique case of the margin writing to the centre instead of the centre dictating education systems of peripheral states.

Lewin and Little (1984) examined the case of Sri Lanka and show how the need for acceptance in international labour markets motivates the educational qualification and/or certification in that country. Indeed, if nations intend to compete internationally, they must keep pace with global trends and demands. Many Zimbabweans go to foreign institutions to further their studies thinking that foreign certification will “...give them an advantage over locally educated ... people competing for scarce jobs” (Nherera 2000, p. 357). A similar mind set exists in Jamaica. Additionally, the increase in transnational and multinational corporations lead people to seek qualifications that is recognized within and outside their countries to facilitate employment transfer.

Governments of small states realize that they must educate students to become multi-skilled and flexible to be competitive (Commonwealth Secretariat, 1986; UNESCO, 2005; Smith, 2002; Yates & Young, 2010). Thus creating the polyvalent worker is also a concern of small states; there is an awareness of the need to produce a different type of citizen, capable of performing diverse tasks in varied environments. To ensure this, many small states look to international examination agencies for certification. Some countries, like Jamaica, have their own examinations, participate in regional efforts and also subscribe to international agencies for certification (Bray, 1998; Smith, 2002). Why do countries do this? Why do some refuse to utilize regional or national examining bodies? Expertise, costs, public acceptance and high standards of international examinations are the reasons (Bray, 1998; Young 2011, 2013; Levin, 2015). Additionally, the legitimacy and prestige conferred by an international body are welcomed by countries striving for international acceptance. Additionally, the validity and reliability of international examinations outweigh national ones.

From as early as 1985, educational representatives of small states acknowledged that “overseas examinations concretize and reinforce intellectual dependence” even while conceding that they were “in various stages of decolonizing examinations” (Commonwealth Secretariat, 1986, p. 47). Nevertheless, they agreed that there is a tension “between local relevance and international recognition” especially for states in the Caribbean and the South Pacific. Various islands have devised national or regional exams to replace those from Cambridge and London. Nevertheless, they are still driven by the need for international recognition, which creates problems because of the tension between the need to institute relevant local programmes while utilizing international certification.

Dependence – a corollary to international recognition

Many small states continue to embrace international exams because of the marketability of the certification (Munbodh, 1987). This explains why the Bahamas, in establishing their own examinations, entered into a contract with the University of Cambridge Local Examinations Syndicate (UCLES) which provided training, consultancy services and “underwrite the examination”. The UCLES is recognized on the certificate that students receive upon successfully completing the Bahamas General Certificate of Secondary Education (Summer & Archer, 1998). The CXC also had to seek international recognition to placate “[p]arents and students with their eyes focused overseas” (Augier & Irvine, 1998, p. 157). The Council employed chief examiners from the United Kingdom and solicited recognition and acceptance from the examining boards in the USA, the UK and Canada.

In Mauritius, the long association with UCLES persists despite the establishment of their own exam syndicate in 1984. The need for increased security, international recognition and the portability of qualifications are all reasons for the continued connections. Additionally, UCLES has been flexible and facilitatory and has adjusted content in keeping with Mauritian requirements. Special papers have been prepared in various subjects. The syllabuses for these special papers have been developed by advisory committees in Mauritius in tandem with Cambridge

(Bray & Steward, 1998). Undoubtedly, solutions can be found to whole scale dependence on international examination boards.

Escaping via Regional Examination Boards

Many small states which try to escape dependence do so through establishing their own curricula and examinations. Others join with regional neighbours to undertake the task of designing curricula, administering and marking examination scripts and awarding certification. Bray (1998, p. 169) attested to the ability of regional bodies to be agents “... for movement away from metropolitan boards which ... carry colonial links”. Regional bodies have been recommended as escape routes. The CXC and the South Pacific Board for Educational Assessment (SPBEA) are regional bodies that are providing alternatives for many small states. Despite these solutions, some states still rely on metropolitan boards and /or revise their own national examinations. Miller (1987a) speaks to the importance of the CXC in helping Caribbean nations which are in no position to be self-reliant, in providing for their educational needs. The introduction of CXC was timely, replacing colonial examinations, meeting common regional nationalistic needs, limiting expenditure for individual nations and defraying costs.

Fergus (1991, p. 567) hailed CXC as a body that “... exemplifies both an indigenous initiative and regional cooperation.” The CXC, he noted, is “...devoted to the Caribbeanization of secondary school curricula... [and] addressed problems of both relevance and scale” (ibid.). Despite challenges and changes “... the CXC has become a major agent for the decolonization of the curriculum...” (ibid., p. 568). Notwithstanding the inherent benefits of regionalism, one major deficiency, as depicted by the CXC, is the inability of those syllabuses and examinations to cater to individual national needs of member countries (Brock, 1988). Each nation may have a different agenda and the regional exam may fail to cater to national objectives or capture the vision entrenched in a national plan. However, because of the shared heritage of British West Indian nations, the CXC is able to meet the nationalistic and cultural needs of most of their member states.

The case is different in the South Pacific where there are historical, cultural, linguistic, national, regional and political differences (Mauritius, 1986; Brock, 1988).

There are diverse languages and local identities differ. Costs, distances, national interests and cultural differences create problems in finding a common ground for all (Udagama, 1987). Despite these problems, the SPBEA, like CXC is successful as a regional body which assists small states in the Pacific to develop relevant national curricula while working on regional exams to replace inherited ones. Like CXC, they also provide training and consultancy services to member states (Munbodh, 1987).

If regional bodies can solve the dependency problems and help small states to assert their independence and create indigenous curricula and examinations, why do they still embrace overseas examinations set by metropolitan boards? The answers are varied. Some small states view regional efforts as impositions that deprive them of their freedom while being unable to solve their problems. Several problems hound regional examination bodies: communication among members, staffing, production and administration costs, accommodating all participating states and generally satisfying all participants with diverse religious, ideological and language differences. These exams are usually difficult to coordinate and sometimes members' contribution to the process is limited (Bray, 1998). Issues relating to familiarity of examiners with students and confidentiality regarding scripts also impact credibility. Additionally, political ideology has been cause for dissention among countries and has even led to some states withdrawing from regional bodies (Bray, 1998).

Because of all these problems, metropolitan examinations may be better suited for small states than regional ones (Bray, 1998). Metropolitan boards are willing to tailor examinations for individual states as was the case with Mauritius and the Bahamas. This is possible because they cater to a large population and so can absorb the costs for individuality which regional, cash-strapped bodies may be unable to accommodate. Additionally, metropolitan Boards offer international recognition, high technical quality, a wider range of subjects, better security and neutrality.

There are small states, like Singapore, that could afford to create their own examinations but they choose, for matters of expediency, to use examinations offered by metropolitan bodies. However, these are tailored to their needs and the Singapore Ministry of Education design them in collaboration with the examiners.

Bray (1998) suggested that those states that still embrace that option should not be thought of as “powerless and dependent” (p. 169). They have made “pragmatic choice[s] ... in the light of available options” (ibid., p. 170).

Successful collaboration is possible and countries should pursue links at the national political level and ties should be forged with regional universities and non-governmental organizations to facilitate the process. There are benefits inherent in regional bodies; small states can reap these if they forge alliances. There are problems of regional collaboration, which cannot always be overcome, but for those states which cannot afford independence, regional bodies provide a viable option.

Curriculum changes in the developed and developing world

This section summarizes what obtains in developed and developing societies as they strive to devise suitable curricula. Green (2003) noted that in order to understand one’s own system better, it is advisable to look at others and see how distinctive one’s system is. This exercise is crucial to facilitate comparison with the Jamaican situation, as an evaluation of these systems will help in the assessment of the relevance of the local curricula to global trends and emphases and interrogate the capability of Jamaica’s graduates to function successfully globally. It will also assist in examining the extent to which the changes made have been responses to pressure from the patterns in the developed world and whether they ensure true independence.

Since the 1980s, scholars and international organizations have developed interest in small states (Lee & Smith, 2010; Badducchino, 2012). Various factors contribute to this; there is an increase in the number of small states due to nationalism and decolonization (Mayo, 2008; Packer, 1991; Bray, 1991; Bacchus, 2005; Pillay & Elliott, 2005). Additionally, small states have drawn international attention due to their “strategic significance” and political crises since the 1980s involving the invasion of small states by big ones (Brock 1988, p. 168).

The education systems of small states are worthy of study although literature on them focus mainly on economics and politics. In the 1980s, the Commonwealth Secretariat developed an interest in and has been the impetus for developing the

field through commissioning literature on small states (Brock, 1988; Mayo, 2008; Crossley, 2008; Lee & Smith, 2010). Most of the world's small states are members of the Commonwealth – thirty-two of its fifty-four members. In 1984, the first general conference on small states was held. This spawned a growing body of articles, chapters in books and case studies on small states. Small states are deserving of attention due to their historical and political circumstances (Crossley, 2008).

The Commonwealth Secretariat (2000) maintains that globalization has exacerbated the marginalization and vulnerability of small states thus they devote a substantial percentage of technical assistance to small states' development programmes. UNESCO and the United Nations also developed awareness of and interest in the special needs of small states (Atchoaréna, Da Graça & Marquez, 2008; Bray, 1991; Mayo, 2008). This writer purports to add to the literature on small states, through focusing on what obtains in Jamaica and by extension the Caribbean. Several variables have been used as indicators of "smallness". The chief ones are population, area of the country and size of the economy. Population is the main indicator; the usual figure is 1.5 million. It is true that Jamaica's population exceeds the usual limit but despite this, Jamaica "exhibits many of the features of the culture of smallness" (Fergus, 1991, p. 562) hence the appropriateness of researching the examination system of Jamaica as a small state.

Synopsis of curricula changes in the developed world

Before examining changes taking place in small states, it is important to examine briefly, curriculum and qualifications reforms that have taken place in the United Kingdom specifically and Europe generally. This is because Jamaica and many other small states were once colonies of European countries and embraced their educational systems. It will become clear whether the small states still take their cues from Britain or if their curricula and examination changes are direct outgrowths of their own political and social agendas.

Advanced societies have changed their approach to education and curriculum in keeping with national and global trends and job market demands. They have become flexible, open to change, and have embraced the need to reform assessment to ensure competitiveness in international league tables (Ozga, 2011;

Young & Muller, 2010; Isaacs, 2015; Hodgson & Spours, 2012, 2014; Raffe, 2002). Some policies are chosen on political grounds or due to political influences. Most changes are in response to globalization; others are driven by society's needs (Ozga, 2011; Isaacs, 2010; Young, 1998, 2013; Kelleghan, 2004; Hodgson & Spours, 2015). The general emphases are on open and distance education, continuing and higher education, the development of qualifications, the creation of the polyvalent worker, broadening access, providing more choices among vocational options, unification, blending general and vocational education, quality of opportunity, unified systems, modularization, democracy and citizenship education, and key skills acquisition.

Much attention is given to training and retraining, the vocational and academic divide, providing more choices among vocational options, extending the knowledge base and information, transmitting knowledge to change the human condition and addressing the relevance of education in the global market (Young, 2008, 2011, 2013; Raffe, 2002; Hodgson & Spours, 2012, 2014; Isaacs, 2014). The internationalization of education, international comparisons of systems, test scores and outcomes, the importance of league tables are all central to changes being made. The factors that contribute to the changes in education systems affect not only developing but also developed nations (Green, Wolf & Leney, 1999; Young, 2011; Yates & Young, 2010).

The emphasis on skills and knowledge acquisition, flexibility, and lifelong learning is intended to make graduates more competitive and productive (Ozga, 2011; Yates & Young 2010; Young, 2011; Isaacs, 2010; Raffe, 2002; EC, 2011; Levin, 2015). European nations have embarked on a programme designed to foster unity as a way to ensure social, cultural and economic progress, producing graduates who can function across the union and globally. Small states share some of these concerns and emphases but they have other agendas that influence their curricula reform.

Curricula changes and current concerns of small states

Like developed countries, small states are concerned about equipping their citizens to be effective global market competitors. However, there are other factors that drive their curriculum reform processes. These include the need to establish a

national identity divorced from their colonial past, escaping dependency and achieving/securing international recognition of certification while tailoring syllabuses to reflect and cater to local needs. Small states are influenced and aided by what obtains in the developed world. Additionally, their reforms are driven by happenings in other small states; although this can be beneficial, sometimes countries adopt the policies and curricula of others without careful thought to their suitability (Dove, 1980; Reid, 2011; Phillips & Ochs, 2004; Grainger, Hodgson, Isaacs & Spours, 2012). Notwithstanding the negatives, small states still copy the developed world. Neo-colonial and metropolitan powers still influence developments in Third World education (Watson, 1984). The trend or emphasis now being placed on relevance of curriculum to local needs was not always embraced. Some small states, even after achieving independence, like Jamaica, still utilized the systems of their predecessors. They did not interrogate the relevance or appropriateness of the inherited content, methods or materials (Nkrumah-Young, Huisman & Powell, 2008; Reid, 2011; Phillips & Ochs, 2004).

The challenges and issues with which Caribbean states grapple are similar to those that exist in the developed world (Miller, 1999a; 1999c). However, internal and external policies and pressures determine what is embraced. The colonial legacy, external relationships and examinations, coupled with the need to acquire international credentials and inability to fund projects to create local examinations, drove and continue to drive Caribbean education systems (Miller, 1999a; Bacchus, 1986).

The academic/vocational debate

As is the case with the developed world, small states are also interrogating issues relating to the academic and vocational divide. There is much emphasis on vocational training and retraining of workers to equip them for the global job market (Commonwealth Secretariat, 1986; Isaacs, 2010, 2014; Hodgson & Spours, 2015). There has been a change in the views surrounding vocational education and the need to close the gap between the two. In former years, the common view was that

vocational and technical education was for slow learners whose careers would be manual labour, while brilliant students pursued academic subjects (Munbodh, 1987; Ozga, 2011). The jobs available in the technical field were considered to be inferior while those requiring academic qualifications were deemed to be superior because they were more highly paid and thought of as prestigious. This perception still prevails in some small states, especially in the cases where those engaged in technical and vocational jobs still earn less than their counterparts who pursued academic education and hold bureaucratic posts. However, the converse is also true – many vocational workers and technical artisans are now earning much more than some academically brilliant workers. Clearly, everyone is aware of the requisite path to compete successfully in the global market yet small states are constrained mainly due to lack of finances and are unable to provide the desired training in these fields. Despite the challenges, nations realize that it is necessary to invest heavily in these areas to remain current and competitive and make economic progress (Bray, 1990; Munbodh, 1987; Raffe, 2002; Hodgson & Spours, 2014; Ozga, 2011).

There has to be a radical shift in the curricula of small states. The plantation agricultural economy that dominated them impacted on the nature of the curricula. Most workers needed only basic education and on the job training was provided (Munbodh, 1987). This had to change in the post-independence era, because it was essential to embrace a wide range of academic and technical skills to be economically viable.

Various factors, including society's requirements and the lack of human and financial resources, inhibit the effective merger of vocational and academic subjects (Munbodh, 1987; Ozga, 2011; Hodgson & Spours, 2015). Yet there is a general consensus that students who pursue technical or vocational education can enter the workforce upon completion of their course with minimal training. However, for this to happen there must be collaboration between industry and schools (Young, 2008, 2011; Young & Muller, 2010).

Small states need to engage in technical education not just to function in transnational corporations or in foreign countries to which they will migrate in search of jobs, but to produce citizens who can assist with national development and

preserve indigenous societies (Brock, 1988). This educated, technical workforce would ensure the localization of skills and reduce dependence on external expertise.

Those education programmes that prepare students for vocational areas may not provide them with opportunities for educational progress. This means that there has to be changes in how education is delivered to facilitate the attainment of multiple skills and higher academic achievement. To effectively reform education, there must be vocational enhancement, mutual enrichment between vocational and general education in terms of certification recognition and transfer of common curriculum elements and unification of the two systems to create one curriculum which integrates both (Young & Raffe, 1998; Raffe, 2002; Hodgson & Spours, 2014, 2015; Young, 2011). This union between practical, hands-on vocational and academic studies is encouraged to ensure all-round development of individuals, to help them to see knowledge as an integrated whole and to foster an appreciation of work standards and ethics.

In this globalized economy, workers have to be so skilled and driven that management can devolve some of their responsibilities to them; they should also be able to interact with technologies and train themselves to keep up with technological changes and knowledge expansion. They should have interpersonal, initiative and problem-solving skills; they should communicate well; be team players; be creative and should be able to understand corporate objectives (Pretorius, 1999; Young, 1998, 2011, 2013; Golub, 2013; Levin, 2015). Links between education and industry offer benefits to the learners, educators, business/industry and society (Pretorius, 1999; Rees, 1985; Young 2008; Young & Muller, 2010; Joyce, 2008). Indeed, the social and economic conditions of society must be given due consideration when reforming curriculum and qualification. The globalized job market requires general instead of specific skills. Modern employers require workers who can use their initiatives, think critically, improvise and produce at a level which ensures sustainability, competitiveness and economic success of businesses (Little, 2000; Burchell, 1992; Yates & Young, 2010).

Relevance of curriculum to society

Not only are small states preoccupied with bridging the academic/vocational divide, but they are also pressured to evaluate the relevance of curriculum for their societies. They have special development challenges due to their vulnerability, remoteness, limited capacities and resources which render them peripheral and unable to withstand global challenges (Lee & Smith, 2010; Thomas & Pang, 2007). Post independence, many small states sought to divest themselves of colonialism by designing curricula to address the needs of their fledgling societies. However, in many states, including Jamaica, it was not only the curriculum that was adapted; the style of administration, certification offered, personnel training, resources and even the aims and purposes were also borrowed (Munbodh, 1987; Watson, 1984). Policy borrowing requires careful thought and selection to ensure that the best practices are introduced for the nation's benefit. National conditions must drive the agenda (Hodgson & Spours, 2015, citing Raffe, 2011; Grainger, Hodgson, Isaacs, & Spours, 2012).

Small states officials realized that they had to devise a different agenda from that of their predecessors; they had to focus on providing manpower, integrate their nations and promote social justice (Dove, 1980). The inherited curricula emphasized academic education and sought to prepare students for higher education. The subjects pursued, it was believed, could not foster developmental leadership, nor help nations to meet their scientific, technological and general manpower needs (Dove, 1980). Additionally, these nations wanted graduates who would be nationalistic and capable to assist in sustainable nation building.

One driving force which pressures curriculum reviewers is ensuring that material is relevant to society's needs. In various subject areas, the emphasis is on ensuring that learners are able to relate to and understand what they are expected to learn. One could argue that the localization of content is not necessarily ideal as this could lead to insular learners ignorant of international trends, unable to face the challenges of the international marketplace or function in the global economy.

However, there must be some merit in first knowing one's self and society to facilitate growth and acceptance of the unknown. Schools are therefore challenged

to provide curricula that are suitable and relevant to local, national and global goals (Dove, 1980; Young, 2011, 2013). The tussle between relevance and mobility sees mobility winning but local information should be incorporated in curricula since small states have to tackle the issue of curriculum relevance to help develop their societies (Commonwealth Secretariat, 1986; Levin, 2015; Ozga, 2011; Badducchino, 2012). Notwithstanding the need to be able to compete globally, small postcolonial states should not lose sight of their need to ensure that content, materials and methods are relevant to the needs of their people and society. It was with these ideas in mind that the CXC was established to replace colonial examinations.

To ensure that students are able to function in their society and foster development, emphasis has been placed on the science subjects; attention is also given to inculcating civic virtues and nationalistic sentiments. However, some small states are hampered in rendering curricula relevant for various reasons. Chief among them is the fact that in many instances, they are financed by their former colonisers (Udagama, 1987). This dependency also sees expatriates as part of the aid package. These work as teachers, curriculum planners and administrators. They assist in devising policies and strategies for educational development which they believe are suitable for the nations. Unfortunately, in many instances, the ideas are irrelevant to the needs of the small states.

Patel (1984) cites various writers who affirm that Western model education is unsuitable for developing countries. Those developing countries that are desirous of ensuring relevance of content to their national objectives have adopted and adapted this model to deliver education relevant to their overall development plans. Harber (1999, pp. 66 – 67) warns small states about the dangers inherent in importing western curricular. These, he says, should not be “...imported uncritically and unadapted into the very different educational contexts of developing countries... [because] often such packages do not address relevant questions, let alone provide suitable answers.” He cites Harber and Davies (1997) who recommend that administrators should examine and comprehend their own “educational context” so that they can find and adapt “relevant educational solutions to meet the plurality of ... needs in developing countries” (Harber, *ibid.*).

Chapter summary

Various internal and external, inherited and emerging policies, problems and pressures impact the education systems of small states. Like developed countries small states are paying close attention to and are revising curricula. In some instances, the emphases are different - small states are under financial pressure and are struggling to escape dependence on their colonial heritage. They are concerned about meeting international approval and recognition, bridging the academic/vocational divide, asserting their independence and tailoring curricula to meet their developmental needs. Small states are also pressured by the policies of lending agencies and international donors to adjust their education systems to meet international standards. European countries are pressured by the need to internationalize education and are driven by policies of the EU to create the European citizen capable of functioning in the unified Europe.

However, educators in all parts of the world are engaged in the revision of curricula to graduate global students. They pay keen attention to developing polyvalent workers, competent in both academic and vocational areas. Curriculum development is an on-going process; as long as there are global changes and new theories of education and as long as society continues to evolve, it will be necessary to revise curricula and revisit assessment modes. It will be instructive to see, in examining the data, how CXC meets and negotiates the internal and external challenges to provide quality examinations and certification in Jamaica. In responding to local, regional and international policies and pressures, CXC constantly revise their curricula, in order to make them relevant to help stakeholders prepare their students to be polyvalent workers capable of successful global competition. The ensuing chapter focuses on the growth and development of CXC and diverse responses to their offerings.

CHAPTER THREE

THE CARIBBEAN EXAMINATIONS COUNCIL

This chapter provides details of the establishment, strengths, weaknesses, innovations and accomplishments of the CXC. As detailed in Chapter Two, there are various engines which drive any national curriculum. Invariably, the traditional aims, linked to Functionalism, of preparing students to be good citizens, who contribute and are loyal to the nation state, are embraced. Additionally, social, economic, political, national and global concerns will impact what obtains in a national curriculum. Globalization demands that students be equipped with marketable skills and abilities, which lead to flexibility and transferability of workers across the globe. These demands have to be balanced against the need to inculcate current, relevant, local content that bridges the academic/vocational divide while ensuring that human capital is developed to produce maximum returns contributing to nation building. Nationalistic and post-colonial sentiments which underscore the need to escape dependence on former colonial masters, while securing certification which is competitive in the international arena, all influenced the decisions to establish CXC. Notwithstanding these germane factors that acted as impetus, the region is constrained by treaties and international agreements, arrangements with international lending agencies and donor organizations in their efforts to effect changes. It is these tensions which saw two distinct camps emerging with those who viewed CXC and its activities as a positive process and the opposing camp which was critical of its achievements. This writer positions herself in the midst of the debate and will use a postcolonial lens to throw light on the contestation. Despite limitations, small states are well served by regional examining bodies which help to effect needed changes to curriculum and help nations to establish autonomy while remaining competitive in the global market.

Ideas for the establishment of the CXC were germinated as early as 1946. Eric Williams, then Prime Minister of Trinidad and Tobago was the first to make the proposal (Bailey, 1996). Almost two decades later, at the Conference of Caribbean Heads of Secondary Schools, strong support was generated for the establishment of “some sort of examinations council for the Caribbean” (Bailey, 1996, p. 89). These

leaders, fuelled by nationalism, thought that in light of immanent social and political changes, reform of the education system was necessary to help students to develop confidence as West Indians (Bailey, 1996; Carrington, 2003).

Definite guidelines were formulated for the establishment of CXC. However, the plans were forgotten as countries sought to gain independence from Great Britain. Additionally, the breakup of the West Indies Federation prevented the enactment of plans. In 1964, at another conference, the decision was taken to establish the CXC. The Council was given "...the responsibility of developing and instituting a system of examinations for candidates who had completed five years of secondary education" (Bailey, 1996, p. 90).

Other regional groups joined the fray, lobbying for a regional examination body. The Caribbean Free Trade Association (CARIFTA) in 1965 further consolidated the idea. However, it was not until April 1972 that fourteen Caribbean countries collaborated and incorporated CXC. At last, Caribbean people, instead of foreigners far removed from Caribbean reality, would set and mark terminal examinations. Regional, nationalistic pride, fuelled by the need to escape dependence on former colonial masters, drove the action. The Council was mandated to replace the GCE O' Levels with indigenous examinations equivalent to them (Bailey, 1996; Mitchell, 1989; Griffith, 1999; Giles, 2011; Carrington, 2003; Burnham, 2008; Gordon, 2009). Citing the CXC (1981, p.1), Bailey outlined the major mandate of CXC:

1. The examinations should be suited to the needs of the Caribbean societies and relevant to the goals of the participating governments. One objective was '...to promote the development at school level of technical and vocational courses which would provide the pupil with immediately useable skills in the world of work.'
2. The syllabuses should aim to provide a worthwhile course of study for students of a wider range of ability than now pass O'Level.
3. The pass/fail concept should be abolished. (1996, p. 90)

Fergus, (a member of the CXC Board from 1980 – 1987) noted that the new Board was "an agent of fundamental change in education" (Griffith, 1999, p. 5).

A year later, the inaugural, historic CXC meeting was held; there, Archibald Moore, Education Advisor in the Commonwealth Caribbean Regional Secretariat, confirmed that CXC was a post-colonial response to the examinations that had been formerly embraced (CXC, 2006). In his address, then Barbados Prime Minister, Errol Barrow, highlighted the nationalistic, integrative function of CXC (CXC, 2006).

The establishment of CXC arose from the view that the secondary education system should be made more relevant to the needs of the people. Bryan (1990, p. 96), like many others, maintained that the overseas examinations “did not accurately cater to the specific characteristics, culture, needs and problems of the Caribbean... they assessed only a small fraction of the school-leaving population.” The belief was that independent nations should not continue to utilize imported education models as they “expose themselves to a powerful force of cultural imperialism and therefore perpetuate their dependence” (Bailey, 1996, p. 94 citing Crossley, 1984, p. 75). This was at the heart of post-colonial efforts to establish an examination board. The aim was to take charge of their own destiny and make the education system “more compatible with the needs and aspirations of Caribbean people and more relevant to the political and social change at the time” (Bailey, 1996, p. 94).

CXC examinations should ensure that students learnt about themselves – “education was called upon to play a leading role in decolonization” (Goodwin, 1989, p. 58). CXC, through its new curricula, was to be an agent of change, facilitating decolonization. Education had been part of the colonial armoury that ensured dominance and subjugation, thus, it seemed appropriate that it should also be part of the weaponry to battle colonialism. The need for education reform became even more urgent as nations gained their independence. As promoted by human capital theorists, independent nations needed manpower to foster development. If only a few were acquiring relevant education, then development would be stymied.

Local examinations were desired as the O’Level exams were thought to reflect “the interests, environment and knowledge of the examiners” who were really preparing syllabuses and examinations for British children (Goodwin, 1989, p. 52). According to Voeth (1990, p. 14), these examinations “did not adequately cater to the specific characteristics, culture, needs and problems of the region. Also, they assessed only the top layer, about 20 percent of the school leaving population.”

Thus, the move to provide examinations suitable for Caribbean students was a postcolonial move to ensure “intellectual independence” and a nationalistic move towards Caribbean unity (Griffith, 1999, p. 3; Carrington, 2003).

The process of establishing CXC was facilitated when the Caribbean Community Common Market (CARICOM) replaced the Caribbean Free Trade Association (CARIFTA) and in 1973, established a desk to work on regional efforts to establish an education system. The intertwining of social institutions ensures that there is a link between education and politics. Consequently “...educational problems often have their origins in economic and political circumstances” (Jervier, 1976, p. 128). Undoubtedly, profound changes in political and social structures are necessary to solve educational problems. However, the economic situation often dictates the scope and direction of educational changes (Jervier, 1976). The “historical background to CXC shows the continuity in actions against colonialism and established the need to expand the effort to other segments of society” (Goodwin, 1989, p. 171).

In 1974, the design phase of the CXC started. Officials from CXC met with and got rich technical support, assistance and information in examination procedures from Boards in the United Kingdom and West Africa. Training in measurement and evaluation, syllabus development and marking of scripts was vigorously pursued. Assistance was received from donor agencies, including UNESCO, to organize and facilitate testing and subject development workshops and the holding of in service training programmes for teachers across the region. Subject teachers and CXC staff members received training through Education Testing Service (ETS) from Princeton. The expertise of established groups was used to assist CXC in creating a product that met with international standards in the initial phases – subject panels were established to develop curricular and testing methods for both academic and technical subjects. Thus, despite efforts to establish an independent, postcolonial examination board, assistance was secured from established bodies to ensure international acceptance of the regional examinations, qualifications and certification.

Teachers were exposed to new approaches to education, teaching materials and new syllabuses. CXC was and still is involved in teacher-training and the

teaching-learning process (Bryan, 1990; CXC News, Vol. 8:1; Mitchell, 1989).

Cambridge assisted in training Chief and Assistant Chief Examiners and markers. The latter marked O' Level scripts from 1975 to 1978 in preparation to mark CXC scripts (Bailey, 1996; Mitchell, 1989; Bryan, 1990). In some regard, this was not an entirely novel endeavour, as Caribbean personnel had been involved in setting and marking Cambridge exams (Bryan, 1982). However, the focus and objective were now different – preparation to function independently. Yet “[t]he ‘overseas syndrome’ would prevent unqualified acceptance of a system developed wholly in the Caribbean” (Mitchell, 1989, pp. 14 – 15).

Six-member subject panels were established to formulate syllabuses. At least three experienced, practising classroom teachers, university lecturers, and a member of the curriculum development department from various Ministry of Education across the region comprised the panels. Opinions from significant educators and national stakeholders were solicited. Teachers and others directly involved in the classroom had input at each stage of the process. At least two years was spent to design each syllabus which has a “rationale which defines the subject area, its candidate population and its role in the curriculum.... general and specific objectives, course content, the format of the examination papers and guidelines for implementing the course” (Drepaul, *CXC News* Vol. 8:1, p. 8).

By 1977, the first five syllabuses were ready. Question papers were sent to two external moderators: one an educator in the Caribbean and one a GCE O'Level Chief Examiner. Thus, despite trying to escape the colonial system, the CXC still had to depend on the mother country. The moderators gave feedback on syllabus coverage, difficulty level, adherence to specifications, range of skills and abilities tested, length of paper, clarity of questions and the standard of the papers (Mitchell, 1989). The first exam trials were in 1978. From 1977, the Ministry of Education in Jamaica, having embraced the CXC, had given schools the option to enter candidates in the exams. Pre-tests were done in more than 100 schools. Five subjects were piloted in twelve territories. A phased introduction of the examination was done to familiarize teachers with the new system and help CXC to assess the quality, suitability and usefulness of the examinations.

Feedback received from the examiners guided adjustments. Teachers and other professionals were also invited to scrutinize the syllabuses. The subject panels answered questions, justified and explained the syllabuses. The Chief Examiners prepared marking schemes which aimed at ensuring parity among markers who were Caribbean teachers with at least two years teaching experience in the subject area. Marking techniques emphasised reliability, consistency and conformity. CXC's impact on the region was noticeable; regional expertise in measurement and evaluation had been developed. Cambridge moderators also helped to mark scripts to maintain standards and to "lend an element of continuity between the traditional ... and the new CXC examinations" (Bryan, 1990, p. 38). Thus, while it is commendable that CXC addressed issues of relevance of content to Caribbean societies via redesigned curricula, it realistically did not sever colonial nor neo-colonial ties. Postcolonial critics would lobby for a complete cessation of ties to ensure that the education product would be autonomous, indigenous and reflective of the narrative from the perspective of the other; the margin writing back to the center and righting the wrongs that had been imposed via colonialism. However, in the interest of ensuring international standards, CXC pragmatically adopted testing and measurement strategies and techniques used and authenticated by developed countries and existing examination boards.

The growth and development of CSEC Examinations

After a five-year gestation period, CXC was born in 1979; five subjects were offered; 30,276 students registered for the examinations. There were 61,384 subject entries which accounted for 60 percent of the candidates in the Caribbean area. Some governments had decided not to make CXC examinations mandatory for their school leavers. Despite efforts to escape dependence, moderators from Cambridge helped to mark in Jamaica. These Cambridge representatives were utilized to help maintain standards similar to GCE's and ensure continuity. Postcolonial critics, who advocate for total independence and telling their own stories, would balk at this. By 1981, the number of subjects offered, number of candidates taking the examinations

and the number of entries had grown significantly. A decade later the number of candidates had increased to 80,000 and the subject entries to 300,000. The Council was then offering 33 subjects. In 2006, candidates sitting the exams had increased to 138,000 and subject entries had jumped to 522,000 in 36 subjects at General and Technical Proficiency levels. In 2011, 153,120 students sat the exams; subject entries were 610,713 (*CXC Annual Report, 2011*; Carrington, 2003). This growth indicates that the Council was successful in carrying out this aspect of its mandate.

Strengths of CXC examinations

Following the examinations there were complaints about them. The CXC, declaring that the target for their first examinations had been “successfully met” (*CXC Report, 1980, p. 9*), embarked on a public education campaign to educate stakeholders about the certification. The public voiced their divergent opinions about the exams in various media. Those in favour pointed to the economic prudence of adopting CXC, as the foreign exchange needed to send to Britain was saved and the Caribbean fees were lower. Another advantage was the fact that the examining body was manned by West Indians who were conversant with the culture, needs, and problems of the region. This meant that the issues of relevance of the content of syllabuses were being addressed. Yet others opined that the nature of the examinations, incorporating varied types of questions (essay type, multiple choice the latter contributing to 26 percent of marks) and assessment strategies (School Based Assessment (SBA), projects, practicals, orals, aurals, and field studies), meant that they were more reliable to evaluate knowledge and academic skills.

One strength of the examinations was the format. The incorporation of multiple choice questions meant that items could be set on a wider range of content and a larger number of objectives thus ensuring content validity for the examinations. These items are machine scored guaranteeing less error in assigning grades, thus contributing to the reliability of the results. Despite the identified benefits of multiple choice items, Goodwin (1989, p. 154) insisted that they are undesirable because they are irrelevant to the reality of society as graduates cannot use “the process of elimination” or work backwards from their answers to solve problems. In real life, he insists, they have to face “open ended situations.” Despite

his view, various international bodies and standardized tests utilize these types of items.

The SBAs had to be justified also. Griffith (1999, p. 11), in his defence of SBAs cited a study conducted by Broomes in 1997 among teachers across the region in which Broomes found that the SBA component:

...enhances the validity and reliability of CXC examinations... it has the potential to offset the unreliability associated with a particular sample of items administered on a particular day. ... Internal assessment provides information about skills and abilities that cannot be easily and adequately tested externally.... [It] enables teacher and student to individualize the curriculum to meet the needs of the individual student, and allows the teacher to assess each student's achievement on specially selected tasks.

The SBAs account for 20 – 40 percent of students' final grades. Therefore, students' final grades are not reliant on a one-shot examination. Through SBAs, students develop their practical, research, interaction, and motor skills which multiple choice or essay questions cannot develop (Griffith, 1999). The SBAs are assessed by teachers using established standards, which are agreed on at standardization workshops that are held region wide. Thus, the teacher makes use of formative assessment and helps to build the students' confidence leading up to the final examinations. Selected statistical samples are moderated by examiners who provide feedback to the teachers to inform their future practice. Consequently, teachers are participants in the final assessment of candidates and are more aware of the assessment techniques being used. Teachers and CXC complement each other in assessing students' performance. The burden on CXC is to ensure common standards while the burden on teachers is to be adept administrators; but the benefits outweigh the burdens. The teachers' involvement may be considered as an excellent assessment tool which is more reliable than an exam, as it is done over a wider period of time (Griffith, 1999; Gibbs Beckford, 1989).

By 1981, the Council's impact on the region was noticeable; regional expertise in measurement and evaluation had been developed. Teachers who were markers had developed assessment practices and established a network of

Caribbean educators. Griffith (1999, p. 19) affirmed that “the CXC marking exercise provides, perhaps, the singular opportunity for such large numbers of educators in the Caribbean to meet annually and share ideas ... from which the region derives immense benefits.” Undoubtedly, these teachers and resource personnel, in addition to improving their own practice, also contribute to development at their local and national levels (Voeth, 1990; Griffith, 1999). CXC’s partnership with teachers saw many of them involved with subject panels, examining committees, syllabus revision, marking of SBAs, writing of items for examinations, reviewing and pretesting of items, and acting as moderators of examinations. Examiners and Assistant Examiners are also teachers with at least a first degree and a minimum two years’ teaching experience at the examination level.

The CXC was viewed as totally different from Cambridge: syllabuses, marking, types of items, how results are issued, the involvement of teachers, educators and governments, the facilitating of seminars for teacher training, holding item-writing workshops for teachers and encouraging consultations from the general society are among their strong points. The examinations are based on different content coverage and the emphases are different. Students are engaged in learning activities that focus on the region though not to the exclusion of the world. This is commendable from a postcolonial viewpoint as the focus is on the indigenous experiences and primacy is given to the local, the immediate, self-knowledge.

Another strength of CXC that is promoted by its supporters is its reporting procedures. Comparison of the way grades are reported by GCE and CXC shows that Cambridge examinations are “attainment driven” while CXC emphasizes the “working knowledge” of students (Bryan, 1990, p. 94). The report on the candidates’ performance in each subject is circulated to schools to assist teachers in evaluating themselves and their students and to guide future preparations to improve teachers’ and their students’ performance. For SBA, the feedback sections provide guidance in administering and grading activities and projects (CXC, 1994).

The fact that there are diverse proficiencies also proves advantageous to students. The Basic Proficiency Level examinations targeted those students who planned go into the working world; while the General Proficiency are geared to provide the foundation for further education. The Profiles for Understanding and

Expression, for example in English are: Understanding 60 percent, Expression 40 percent for the Basic exam. For the General, heavier weighting is attributed to Expression (56 percent) and less for Understanding (44 percent) (Bryan, 1990; Gibbs Beckford, 1999).

The existence of Basic, General and Technical proficiencies meant that more students could take examinations. Students with varying interests, abilities and talents could choose a mix of proficiencies to meet their needs (Griffith, 1999). In their 1981 report, CXC affirmed that the Council had:

... made every effort to achieve its basic mandates, which were to set and maintain standards which ensure regional and international acceptance of its certificates, and to provide acceptable certification for a larger number of candidates than the traditional 20 percent certified by Overseas Examining Boards. (CXC, 1982, p. 12)

Both the British moderators and the CXC Chief Examiners testified to the attainment of high standards in the exams. For 1982, the Council reported that there had been “steady growth and consolidation ... operations of the Council were reasonably well established” (CXC, 1983, p. 10).

In the *CXC News* Volume 1, No. 2, May 1981, an article entitled “CXC/GCE A Comparison” speaks to a study that was done by a British consultant, Tom Christies, which compared the 1979 CXC and GCE O’ Level results. Candidates’ results for Jamaica and Barbados for the same subjects: English Language, Mathematics, History and Geography were compared. The study revealed that except for Geography, the performance correlation was close. Those who did well in Maths and English in CXC also performed well in GCE. However, candidates thought that CXC was more difficult. For History, the students experienced the same level of difficulty but because there were different syllabuses it meant it was not possible to prepare students with the same syllabuses for the different exams. For Geography, more students gained grades I and II from CXC than gained A, B and C from GCE. The students found CXC Geography to be easier. CXC reports that it had taken steps to correct the discrepancy. No details of the steps that were taken were provided. Neither did they explain why one exam was less difficult. Additionally, no details

were provided on who retained the consultant to conduct the study. All these factors must be kept in mind when considering the findings.

The use of profiles in reporting grades is another strength of CXC. These are intended to assist students and employers to analyze students' strengths and weaknesses. Profiles ensure that more information on candidates' achievement and overall performance in various aspects of the subject is communicated. This is an innovation in assessment that was not used by GCE. Candidates are assigned a numerical grade from I to VI whereas Cambridge uses letter grades. The within subject profile is done using letter grades from A to F. These, Griffith (1999, p. 14) maintain, "...facilitate refinement in the decision-making process" and provide more information about the candidate's achievement. Thus, prospective employers, placement officers, admissions officials at universities and others who will require the services of CXC graduates are helped to make decisions. Teachers can also use the profiles - indices of students' learning - to monitor the achievements of their students and their own teaching. They can also assess pitfalls in their teaching and see areas on which they need to focus in order to improve students' performance. Additionally, the profiles make it easy to make distinctions among candidates getting the same grade since strengths and weaknesses are highlighted. The candidates are also able to evaluate themselves to inform decisions to resit, go on to another unit, do further studies or make career decisions (Griffith, 1999; Goodwin, 1989). The subject panels determine the profiles which incorporate Cognitive, Affective and Psychomotor skills. Subjects such as Caribbean History, Mathematics, Office Procedure and Principles of Accounts are judged mainly for Content or Cognitive skills; both Cognitive and Psychomotor skills are tested in Building Technology, Food and Nutrition, Geography, Integrated Science and Technical Drawing. Psychomotor and Affective Skills are tested in Typewriting. (See Appendix 4 for profile and grades explanation).

An additional strength of CXC is the fact that the examinations were not regarded as valuable only to prepare students for university but also to equip them with a general education and utilizable skills. This is in keeping with the concern of small states regarding the relevance of education and the acquisition of skills for the workplace. Wilfred Beckles (2009), then CXC Registrar, in his defence of CXC,

affirmed that the examinations were providing certification to a larger number of candidates than GCE ever did because it was assessing a wider cross-section of school leavers. Griffith (1999, p. 5) averred that, “The Council sought to move away from an exclusionary approach to education to an inclusionary approach... to respond to the need within the region to provide quality education for all.” The subjects and content of the examinations were highlighted as positives. They met the nationalistic needs of the nations in the region as they focused on “basic considerations of a developing region concerned about development and planning (Bryan, 1990, p. 41). CXC meets the need for skilled and efficient labourers for business and industry (Griffith, 2011). Principles of Business, Principles of Accounts, Shorthand, Typing, Industrial Arts, Food and Nutrition and Clothing and Textiles were cited among relevant subjects. CXC, in catering to the needs of governments of the region, is equipping school leavers with employable skills.

In support of the utilitarian value of its examinations, CXC affirmed that the business education subjects, “are intended to contribute to a student’s general education as well as to the acquisition of skills applicable to the world of work” (CXC, 1981, p. 4). They recommend clusters of subjects that students may pursue to get endorsement of their certificate in particular areas. For example, if students took Principles of Business, Office Procedures and Principles of Accounts, they could be certified as Accounts Clerks. A Clerk Typist would have had to do Principles of Business, Office Procedure and Typewriting.

In praise of the Principles of Business syllabus and examination, Dr. Simon Hendrickson, an economist and CXC resource person educated in the Caribbean, the US and the UK, said:

CXC is capturing what is really the dynamic business environment in the Caribbean, as opposed to what was normally the case for those of us who did GCE... the individual who does well in the CXC POB certainly does understand, for example, the dynamics of Caribbean organizations.... (CXC News, 9:1, p. 11)

It could be argued that as an employee of CXC, he was obliged to speak well of his employers, but the fact that the syllabuses and examinations speak to the Caribbean reality, supports the view of the regional relevance of the material.

As part of its efforts to ensure the society embraced their qualifications, CXC was involved with the Jamaica Employers' Federation in hosting workshops geared at assisting personnel officers to assess potential employees with CXC certification. Additionally, case studies were undertaken involving candidates with CXC certification who were seeking entry-level posts in tourism, manufacturing, communication and the commercial sectors. Workshop participants considered the qualifications relevant and suitable for the posts (CXC News, 9:1). Despite these kudos, only moderate success was achieved in promoting acceptance of the Basic Proficiency examinations which required less academic rigour. In later years, the Council had to discontinue them because of their unpopularity and non-acceptance by stakeholders who viewed them as inferior to the General and Technical proficiencies.

Students pursuing CXC courses have excellent opportunities to relate theory to the real world through the SBA components of courses such as History, Geography, Social Studies, Principles of Business and Principles of Accounts. Those pursuing Social Studies and Geography get the chance to do field work and surveys while those in the sciences do lab work and practicals. An *Observer* article reported that teachers agreed with and welcomed the change in the regular teaching methodology and praised the potential of SBAs to "awaken a new generation of young professionals," who are taught to fathom the processes, problems and challenges that occur in real life (*Observer*, 1998, p. 25). Additionally, students have the opportunity to explore issues of cultural and communal significance to the Caribbean. The CXC were also happy to report that at a Technical Examinations Conference held in the United Kingdom, two recommendations that were made, were already in use by the CXC: "learning objective format for presenting syllabuses, and profile reporting, a method which indicates candidates (sic) strengths and weaknesses" (CXC News, Vol. 1, Number 3, 1981, p. 5). At that conference, the CXC officials established contact with their United Kingdom counterparts, fostered discussions with examiners and attended training sessions for examiners as well as

identify reference materials that could be valuable to students and teachers. Thus, they were not operating in isolation but were still dependent on and receptive to others while ensuring that their system met the criteria established by international boards to render their certification comparable and competitive internationally.

Negative reactions to CXC

Notwithstanding these laudable positives, those who opposed the system, like Thompson (2003, 2005, 2007), voiced their concerns. Chief among these was the fact that CXC had to prove its worth. As is typical with small states seeking international recognition, there was the fear that the certification would not be accepted outside the Caribbean. In a *Jamaica Daily News* article in September 1980, the Council assured the public of the wide regional and international recognition that it had received and noted the acceptance of the certification by the University of the West Indies and the University of Guyana, O' Level examining boards in the United Kingdom and university admissions offices in the United States of America and Canada. The University of Guyana, the University of the West Indies Nursing School, teachers' colleges and the then College of Arts Science and Technology, now University of Technology, Jamaica, all accepted the certification. Griffith (1999, p. 20) cited Fergus (1980, pp. 87 – 88) who, in responding to people's misgivings, insisted that the concerns were not so much about the "...international currency of CXC [but rather] from a basis of mistrust of the radicalization implicit in the *raison d'être* of CXC, itself betraying an inadequate grasp of all that is involved in the process of decolonization." Those who were still loyal to or had placed confidence only in the value of colonial examinations had no confidence in CXC exams.

Those opposed to the examinations, like then Minister of Education in Barbados, Tull, insisted that, "CXC demanded too much from everyone in the region" (Mitchell, 1989, p. 63). Teachers added their dissenting voices, insisting that the syllabuses were too wide and difficult and appealed to CXC to modify the content (Bryan, 1990; Mitchell, 1989).

In response to the negative reaction and the resistance from varied sectors, the CXC undertook organizational development. They focused on reviewing their

“role, mission, goals and objectives” (Voeth, 1990, p. 17). Some positive outcomes were achieved between 1981 and 1983 but there was still dissatisfaction with the limited success of the organization. Their rating in the public eye was low; some businesses were not accepting the certifications and students were not achieving the expected success in key subjects - Mathematics and English. Despite efforts to improve its operations, the success rate in the key subject areas still remains problematic in some countries; however, the general acceptance has improved.

The CXC had envisioned replacing 28 GCE O’ Level subjects by 1987, but by that time, CXC exams were being run simultaneously with those offered by GCE. Although more students were entering for CXC than GCE, government did not mandate schools to enter for CXC examinations (Giles, 2011). Table 3.1 shows that from a total of 30,964 students in the examination grade – Grade 11, only a small percentage was entered for external examinations in 5 subjects. Bailey (1996, p. 99), in her assessment of the CXC at that time, noted that the examinations “...have replaced, for the most part, the overseas Cambridge GCE Ordinary Level examinations and in that respect have satisfied the overall intention of the ‘inventors’.” Thus, despite having achieved their objective, the secondary education system in Jamaica, still had not reaped all the possible benefits of CXC. There were other factors, such as the inherited dichotomy between rich whites and poor blacks from colonialism, which impeded success.

Table 3.1 Entries for CXC and GCE Exams from Jamaica, 1996, in five subjects

Subjects	CXC General and Basic entries	GCE entries
English A	13, 402	4, 506
English B	3,998	252
Caribbean History	4,267	1,047
Mathematics	12, 613	2,787
Food and Nutrition	1,001	97

Source: Statistics Section, Ministry of Education; Social and Economic Survey, 1990

Help from International Agencies

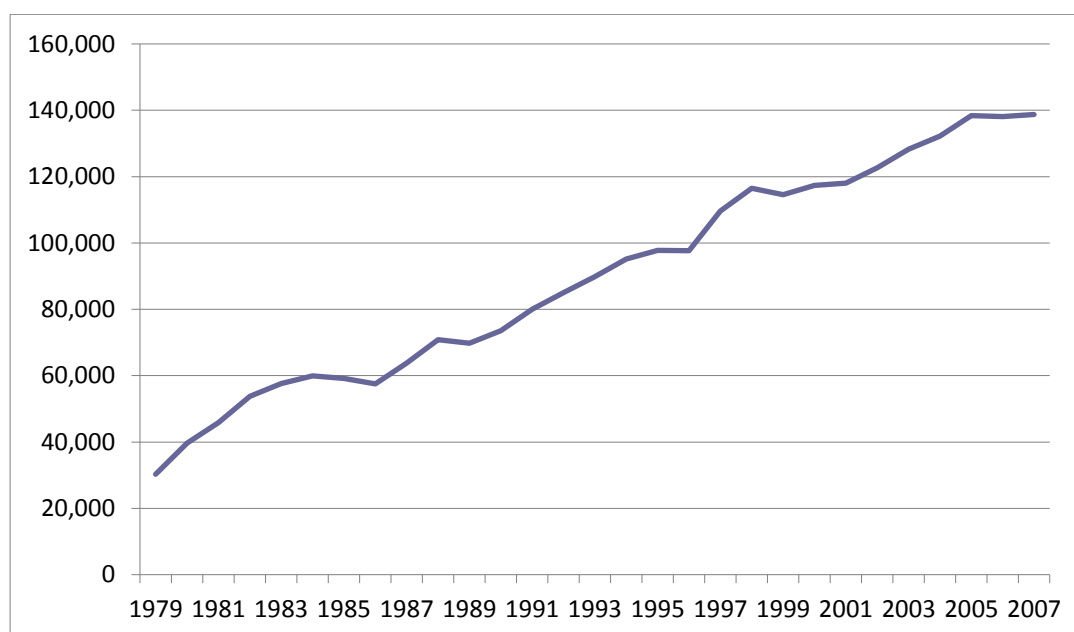
Due to financial constraints, international organizations have assisted CXC in carrying out its mandate. Despite the quest for independence, the Council, typical of operations in small states, had to rely on international assistance to successfully carry out its mandate. As mentioned earlier, this is not necessarily a bad thing. The concern is that, in many cases, terms and conditions of aid packages have negative repercussions on a country's social systems. A USAID-funded project from 1979 to 1983 helped CXC to improve the quality of curricula and instructional approaches in the region's secondary schools through teacher training in new teaching and evaluation techniques, the production of materials and orientation for the new syllabuses. Workshops were held in different territories at various levels. The success of the project depended on the ministry of education officers and teachers trained at the workshops who were mandated to transmit the information to others. The materials produced were duplicated and distributed to assist with the teaching of the new syllabuses. When external evaluation of the project was undertaken by a US technocrat, Dr. Karl Massanari, Director of Education Resources Information Center (ERIC), he noted the syllabuses were "commendable in almost every respect" especially "basic conceptualization," and described this as "a significant advance in Secondary Education for the Caribbean Region" (*CXC News*, September, 1981, p.6).

In addition, in 1985, CXC obtained a grant of Canadian \$4 million through the Canadian International Development Agency (CIDA) to help develop syllabuses and resource materials to improve the teaching of science subjects. The aim of the project was to strengthen the delivery of technical, vocational and science education. Questions about the terms and conditions of the grant may be asked and the extent to which CXC had autonomy over the project can also be interrogated through postcolonial lenses. Regional teachers received guidance in what and how to teach and in assessment strategies. Thus, in this respect, CXC was helping to develop the educational and professional competencies of teachers and, by extension, helping in the development of the wider education system in the region (Griffith, 1999; Gordon, 2009; Giles, 2011). At orientation workshops, modules for various science and technical subjects were drafted, tested, printed and distributed to participating territories.

Despite the apparent advantages of CXC's working in collaboration with teachers, Goodwin (1989, p. 134) warned that CXC should "avoid the appearance of being self-serving [and] any inclination to prepare teachers to teach mainly to their examination syllabus." This could prove to be an economic strain and also put "the integrity of the examinations" in question. Despite this view, in the *CXC News* (Volume 8, Number 1, p. 9), Drepaul, speaking on behalf of CXC, noted it had realized its dream of creating syllabuses relevant to the needs of Caribbean people and gained the respect of people in the Caribbean in less than a decade.

Since 1979, CXC has continued to grow, offering excellent service and involving teachers, technocrats, educators and the region's governments in creating and implementing syllabi and the grading exercise. The steady increase in the number of candidates across the region that have entered for the examinations since 1979, (see Fig. 3.1), is one testament to CXC's success.

Figure 3. 1 Growth of Candidate Entries for CSEC 1979-2007



Sources: *CXC Statistical Bulletin*, 2000, 2004, 2007

Recently the figures are declining as detailed on Table 3.2 below. This may suggest that the market is saturated or that students are sitting other exams such as the CCSL, also offered by CXC. In 2016, CXC offered 25 subjects in 46 papers at the CSEC level with the majority of the 132,674 students sitting Math, English Language,

Social Studies, Principles of Business and Human and Social Biology. New subjects introduced include Theatre Arts and Physical Education.

Table 3.2 Candidate entries for CSEC 2008 – 2016

YEAR	CANDIDATES ENTERED
2008	143,017
2009	143,489
2010	143,447
2011	153,120
2012	156,968
2013	149,311
2014	142,884
2015	132,892
2016	132,674

Sources: *CXC Annual Reports: 2009, 2010, 2012, 2014, 2015, 2016*

Caribbean Advanced Proficiency Examination (CAPE)

In recent years, CXC has grappled with the need to provide a “post-secondary examination that would be relevant to the circumstances of the region and the changing global environment in which citizens must live” (Griffith, 1999, p. 7). These concerns gave birth to CAPE in 1998 (Barrett, 2008; Giles, 2011; Stephens, 2004). These examinations encompass academic, technical and vocational subjects and cater to students with diverse abilities and interests. Thus, they provide opportunities for a wider cross section of students than the Cambridge A’ Level examinations did. The establishment of CAPE is another milestone for CXC in developing the secondary education system in the region. Although CAPE had been germinating since 1978, the first exams to replace their GCE A’ Level counterparts were piloted in 1998 in seven subjects. A European Union-funded project from 1996 - 98 facilitated the development of syllabuses and training of teachers for CAPE examinations. Again, questions about dependence and neo-colonial control can be asked. Unlike GCE A’ Levels, a two-year programme, CAPE subjects are presented in two sequential units; at the end of each year, the relevant unit is examined. Each

unit comprises three modules. All subjects have an internal assessment component. Qualifications are reported using grades I to VII and Profiles from A to G. Students' achievements are reported in terms of the content of each module. This method of reporting "facilitates articulation between CXC syllabuses and other programmes or courses at the tertiary level" (Griffith, 1999, p. 14).

By 1999, 18 subjects were offered and articulation agreements had been reached with the universities of Guyana and of the West Indies and with the UK National Academic Recognition Information Center (UK NARIC), which accepted CAPE certification for British higher education institutions. That organization noted that, "it was impressed with the structure and content of CAPE. It was particularly impressed with the flexibility of CAPE to offer various combinations of breadth and depth" (Griffith, 1999, p. 21). The State University of New York accepted the certification in November 2006. By that year, candidate entries had risen to 19,019 and subject entries to 69, 018. In 2011, subject entries were 108,380 while 27,595 candidates sat the examinations across the region (*CXC Annual Report, 2011; The Examiner 2009 and 2010*).

CAPE examinations are welcomed by students because of the modular approach and the fact that tertiary institutions accept them. Interestingly, the GCE A' Level examinations had been modified to offer a similar approach, with the Advanced Subsidiary (AS) done at the end of the first year in sixth form and the Advanced Level (A) after completion of the second year.

The number of students entering for CAPE examinations and the number of subject entries have grown steadily since CAPE's inception. In 2008, 22,782 candidates entered for the CAPE examinations, an increase of 1,293 over the previous year. Performance in most subjects has also improved markedly. The steady growth in unit entries and candidate entries is presented in Table 3.3.

Table 3. 3 Growth in CAPE Subject and Candidate Entries (1998-2017)

Year	Number of Candidates	Number of Subject entries
1998	900	985
1999	1,300	1,549
2000	1,627	2,672
2001	3,387	6,562
2002	5,741	15,650
2003	7,336	23,145
2004	9,620	30,829
2005	13,651	43,992
2006	19,019	69,254
2007	21,489	81,894
2008	22,782	86,360
2009	24,183	93,648
2010	25,785	101,642
2011	27,596	108,381
2012	28,043	107,729
2013	28, 228	108,127
2014	29,379	113,301
2015	30,545	120,764
2016	30,883	123,921
2017	29,916	117,963

Sources: *The Caribbean Examiner*, Vol. 6, no. 1, September 2008; Vol. 7, no 2, October 2009; October 2017; *CXC Annual Report*, 2011, 2012, 2013, 2014, 2015, 2016.

New Generation subjects introduced at this level include Digital Media, Entrepreneurship Statistics, Tourism, Green Engineering, Theatre Arts, Animation and Game Design, and Logistics and Supply Chain Operations. A total of 47 subjects in 177 papers were offered in 2016, giving students a wide variety from which to choose, to prepare for the global marketplace. Students' performance in the new generation subjects has been outstanding, overall. In 2017 the success rates were as follows: Physical Education 99%, Animation and Game Design 95%, Green Engineering 80%, Financial Services 70%, Performing Arts 95% Unit 1, 100% Unit 2, Digital Media 99% (*The Caribbean Examiner*, October 2017)

CXC Associate Degree

Since 2005, CXC also offers an associate degree in fifteen different subject areas to candidates who have successfully completed eight units of the CAPE programme over a two year (for students in post-secondary education in high schools) or five-year period for mature, out of school candidates (Barrett, 2008; Giles, 2011; Sam, 2005). The objectives, as indicated by the Council included the need to provide students with “knowledge, skills and attitudes required for the workplace and for continuing tertiary level education” (CXC). The Council also sought to enhance the marketability of post-CSEC qualifications through these associate degrees. Some of the non-traditional areas that are included among the offerings are Performing Arts, Tourism, Environmental Studies, Sport Studies and Industrial Technology. Thus, the Council is consciously expanding the subject areas to meet the needs of the region.

Initially, some community colleges that offer associate degrees were opposed to this initiative as they thought this would compete with their tertiary level programmes, but the Council reassured them that they only wanted to provide access to tertiary education to more persons “to take account of the radical changes that are occurring in the education arena” and help the region find “creative ways of extending access to quality education.” The Chairman, Professor the Honourable Kenneth Hall, expressed the view that this era of globalization is one in which “there is a need for portable qualifications as graduates are now even less likely to be limited to their national space” (Sam, 2005, p. 1). Thus, through this initiative, the Council continues to meet the needs of the region’s graduates, who will seek employment in the global arena.

Articulation agreements, designed to ensure that students can easily transition among institutions, have been reached with Saint Mary’s University in Canada, Barry, Florida State and St Leo University, and State University of New York, among others; these agreements allow students who complete the associate degree, one year off their bachelor’s degree programme. According to Cleveland Sam, a CXC executive, this “... demonstrates the confidence ... in the high standard of the CAPE syllabuses and the pedagogy of the students qualifying with CAPE” (CXC, 2008, p. 21; *The Caribbean Examiner*, May 2015). Additionally, “From as early as 1999, UKNARIC

conducted an assessment of CAPE and agreed that the qualification is of the highest standard” This body has also commended CAPE passes as comparable to GCE Advanced level and suitable entry qualifications to UK higher education institutions (CXC, “Associate Degree”, 2018).

Technical and Vocational Education Qualification

CXC has also played a role in certifying technical and vocational qualifications with the aim being to facilitate the free movement of skilled workers within the Caribbean Single Market and Economy (CSME). As of 2007, CXC has started to offer the Caribbean Vocational Qualification (CVQ), Level 1 certificate with plans to advance to further levels (Barrett, 2008; Giles, 2011). In 2011, 1,301 students received “transcripts for work completed” while 523 qualified for CVQs. In 2017, 4,502 transcripts and 1,522 full certificates were issued (CXC *Annual Report, 2011*; *The Caribbean Examiner*, October 2017).

The number of students entered and certified and the occupational areas tested steadily increased over the years. In 2016, there were 3, 789 students entered in 40 different occupational areas. These figures increased to 5,199 students in 2017 and 40 subject areas. These include Food and Beverage, Air Conditioning, Motor Vehicle Repair, Digital Animation, Crop Production, Commercial Food Preparation, Electrical Installation, Fabric Design, Furniture Making, Welding, Motor Vehicle System and Data Operations. The array of subjects speaks to the efforts of the Council to remain current and prepare students for the contemporary working landscape (CXC *Annual Report, 2016*; *The Caribbean Examiner*, October 2017).

Caribbean Certificate of Secondary Level Competence (CCSLC)

Another initiative, the Caribbean Certificate of Secondary Level Competence (CCSLC) designed “to certify the knowledge, generic competencies, and attitudes and values that all secondary school leavers should have attained”, was introduced in 2007 (Barrett, 2008; Giles, 2011). This examination was a response to the needs of regional policy makers and educators, who, desirous of securing “universal

secondary education”, requested the creation of “a programme and certification to meet the needs of students with a wide range of abilities” (CXC 2015; Griffith, 2014).

Among the competencies assessed are Oral and Written Communication, Mathematical Literacy, Critical Thinking, and Problem Solving. These competencies provide a foundation for further studies, the working world and life as a regional and global citizen. The fundamental values and attitudes that all secondary school leavers should have that are certified through this examination include: “A Positive image of self, family, community, region and the world; Respect for others... a dislike for violence ... commitment to ethical and moral societies ...” (CXC, *CCSLC* n.d.). The successful completion of at least five subjects, including Mathematics and English, ensures that candidates receive the CCSLC. Candidates have a wide array of choices among the disciplines. This exam is CXC’s initiative to respond to the changing demands on education in the region and is designed to give employers an idea of the skills and abilities possessed by potential graduates (Francis & Rose, 2004; Barrett & Barrett, 2005).

UK NARIC’s positive assessment and benchmarking of the subject knowledge, general competencies, learning outcomes and assessment standards of the CCSLC lend credence to the examinations and assessment. They found the exams comparable to Key Stage 3 in the UK and year 9 in Australia, Canada and the USA. (Wright, 2014).

CXC collaborates with local Ministry of Education in the region to offer joint certification upon completion of the CCSL. This ensures that “particular national needs” are incorporated in the content and assessment of the CCSLC. Students and teachers across the region have had positive views of the programme and affirmed that it is a good foundation on which to build in preparation for CSEC examinations (Griffith, 2014, p. 13).

The increased entries for this examination, depicted in Table 3. 4 below, show that many governments have embraced it. In 2007, subject entries were 6,792 and candidate entries were 2,669. By 2008, the figures were 19,048 and 7,839 respectively, with the largest numbers doing Mathematics and English. The candidates’ performance in the initial years was outstanding. In 2008, of 6,792 subject entries, 61 percent achieved the Master or Competent level, the acceptable

achievement levels (CXC, 2008, p. 16). In 2011, 70 percent were successful. Then 19,678 candidates from 12 countries entered and there were 49,063 subject entries. Success rates were also positive in 2012; 79 percent of the candidates entered were successful, although the number of candidates had declined significantly; in 2013, 65% and 2014, 66% attained successful passes.

Table 3. 4 Entries for CCSLC over select years

Year	Subject Entries	Candidate entries	Success rates
2007	6,792	2,669	70%
2008	19,048	7,839	61%
2009	60, 396	21,563	54%
2010	63,697	20,354	63.7%
2011	49,063	19,678	70%
2012	Na	7,249	79%
2013	Na	na	na
2014	13,742	5,478	na
2015	12,330	5,703	na
2016	14,955	7,159	na

na – figures are not available Sources: CXC 2008; *Caribbean Examiner*, 2008; 2010; 2014

Strengthening Second Chance Education Programme (SSCEP)

In collaboration with USAID, in October 2012, the CXC launched a special programme to give at risk youth between 16 and 30 years old a second chance to develop life skills, get training, and certification to prepare them for the working world. Students complete courses in CVQ and CCSLC programmes. This is another success story of CXC. Currently operating in ten Caribbean territories, the results among participants are encouraging with the majority of entrants achieving mastery level in terminal examinations (CXC 2018).

Recent developments

In recent years, CXC has introduced various technological innovations to improve their offerings and ensure that they remain current and competitive and meet the needs of their stakeholders. Surveys and working groups have been

established to study trends, identify weak areas and improve service among stakeholders (2016 Annual Report). Continuous assessment and revision of syllabi are undertaken to ensure currency and relevance both for the regional market and to meet international standards.

E-testing was introduced in 2017, in a move towards paperless exams; online marking, which started in 2013, became effective for all papers in 2017; a monthly bulletin is circulated to 50,000 stakeholders; webinars are held throughout each year to equip markers and educate stakeholders; teleconferencing is instituted for grading activities for both CSEC and CAPE subjects; e-authoring of items is being done for storage in an item bank; the CXC website was redeveloped and a CXC app has been launched. Plans are afoot to develop an online learning hub to assist stakeholders with the provision of resources for their edification and development (*The Caribbean Examiner*, May 2018).

Equivalency charts assigning credits for CAPE subjects, have been drafted and articulation agreements have been reached with various universities in the USA and Canada, which accept students with CAPE qualifications into their programmes, as part of CXC's efforts to ensure that regional graduates are accommodated globally.

Conclusion

The CXC was established as a post-colonial response by Caribbean governments to English based examinations. In the heights of nationalism and post-independence, it was thought that establishing an indigenous examination board would serve the postcolonial interests of the region. Despite the desire to sever colonial ties, we have seen a continued dependence on neo-colonial bodies and organizations to fund and authenticate education to secure international acceptance. Undoubtedly, requirements imposed by donor organizations have also impacted the operations of the Council. Since its establishment, CXC has introduced various examinations at diverse proficiency levels. They have developed more than 60 syllabi for CSEC examinations and 46 for CAPE. The introduction of CAPE to replace GCE Advanced Level examinations, like CSEC that replaced O' Levels, has

been viewed with mixed feelings. Some parents, employers and institutions have been reluctant to embrace the certification because of their desire to ensure that certifications meet international standards to facilitate movement of students in the global arena. Additionally, their adherence to colonial standards and lack of confidence in the local product has led to dissatisfaction with CXC. It is necessary to evaluate the extent to which CXC meets international criteria and how students' performance measure up against international standards.

Despite this, there has been a steady annual increase in the number of candidates and entries for the examinations. The introduction of new, relevant subjects, the availability of different proficiencies, the possibility of re-sitting examinations in January and the provision of alternative papers for private candidates have all contributed to the institution's growth. The success of CAPE, in tandem with that of CSEC, has helped to ensure that CXC "now stands as one of the more significant success stories of Caribbean development and the region's effort to provide education for all" (Griffith, 1999, p. 20; Giles, 2011; Carrington, 2003). In 2011, the Council examined more than a quarter of a million students in January and June examinations and engaged the services of more than 5,000 teachers as script markers thus facilitating the testing and measurement capabilities of regional teachers (Giles, 2011).

Notwithstanding CXC's outstanding contribution to education in the region, there is scope for improvement. Despite the efforts being made with CCSLC, there is still the need to ensure that graduates can function globally yet bring value to their national economy. The success rate in key subjects - especially Mathematics and English - is still less than satisfactory. However, in even in these areas, there has been a marked increase in performance. In 2007, only 40% of students who sat the Mathematics examination and 62% who sat English were successful. By 2016, 53% were successful in Mathematics and 74% in English. Jamaica's figures lag behind these regional figures and so are still cause for concern.

However, problems inherited from the colonial era that are inherent in the Jamaican education system have impacted success. The disparity among schools, the nature of students who attend various schools, the policies of school boards, principals and teachers all impact the progress that CXC makes in the region. The

onus should not only be on CXC but on governments, parents and teachers across the region to devise strategies to improve student performance. The data presented in Chapter 7 will highlight stakeholders' views regarding factors which challenge the Council and impact its performance.

Because of the range of subjects, the emphases in syllabuses, the various proficiencies offered and the diverse modes of assessment, CSEC and CAPE have been hailed as examinations more appropriate to Caribbean people and as contributing to the region's development. Griffith notes that the "Council has contributed considerably to the process of regional integration and the development of the identity of the Caribbean citizen" (1999, p. ix). CSEC and CAPE have been accepted and embraced not only across the region but by some universities in the US, Canada and the UK.

Despite these achievements, there are still those with a negative perception of CXC. Nevertheless, overall, CXC has been successful in fulfilling its mandate. Affirming the role and function of CXC, Dr. Didacius Jules, then Registrar, avers, "...our responsibilities do not end with the production of syllabuses and the administration of examinations. They extend also to helping to raise educational standards while improving achievement" (Jules, 2008, p. 10). Jules embarked on a project to take CXC "To the Next Level". He insisted that the organization is committed to helping the Caribbean region prepare youths and workers for this competitive global environment. Also, he has invited input from CXC examiners and stakeholders across the region to assist in repositioning CXC. Efforts are being made to develop staff, the organization and the products and services they offer. In collaboration with CARICOM, the University of the West Indies, Caribbean Development Bank, and the Organization of Eastern Caribbean States, CXC, having made "phenomenal strides" and "successfully navigated [past] challenges," intends to continue to develop the human resources of the region and remain as "a critical enabling element of the architecture of regional integration" (Jules, 2008, p. 7).

James (2018) chronicles CXC's contribution to Caribbean Economic Development, underscoring the fact that the Council is the leading regional institution which provides assessment from the primary through the tertiary level thus contributing significantly to the development of the region's human capital and

by extension to economic development. The number of students sitting five or more subjects each year testify to the impact of CXC on the region's students. Despite this, James (*ibid.*) notes, and this writer affirms, that global evolution dictates continuous innovation to adapt to the changing global demands. CXC must therefore continue to assess, evaluate and innovate in all the areas in which the Council provides service: as education consultants, syllabus, curriculum and resources developers, measurement and evaluation experts, teacher training and qualification providers, in order to remain relevant and useful to the region.

Chapter four provides an overview of the Jamaican education system and details the genesis of the relationship with CXC with the aim being to elucidate the consequences of this liaison on the system.

CHAPTER FOUR

FROM COLONIALIZATION TO GLOBALIZATION

THE JAMAICAN SECONDARY EDUCATION SYSTEM

AND THE MOVE TO EMBRACE CXC EXAMINATIONS

“...if one seeks to understand the social dynamics of today, one must trace the major processes of history” (Manley, 1975, p. 46).

“Knowledge of where we are coming from is crucial to plans for the future” (Nettleford, 1986, p. 2).

Introduction and Rationale

This chapter provides an overview of the development of Jamaica’s secondary education system. As Denzin and Lincoln (2005) recommend, it is desirable to concentrate on and pay attention to details of the context in which a case unfolds and the genesis of the system, in order to fully comprehend it. This is applicable to fathom the pressures, policies and problems that impact the success of the CXC in their attempts to provide qualifications for secondary level students in Jamaica. The educational history of the English-speaking Caribbean is interwoven with developments in education in England from which the nations drew inspiration, direction, form and content (Miller, 1999b). Education in Jamaica has undergone radical evolutionary changes in the last two centuries, yet some things seem to have remained unchanged (King, 1979; Miller, 1999c; Burnham, 2008; Barrett, 2012).

“The aims of education, the resources made available and the curriculum have changed over the years, but many of Jamaica’s schools still reflect [its] history” (Evans, 2001, p. 2). Arguably, significant changes have been in response to or in an effort to escape from the colonial system. Regrettably, these efforts have not been as successful as envisioned as evidenced by CXC’s inability to break the stranglehold established under colonialism that saw one type of education being provided for the children of the rich, white colonials and another for the children of poor, disenfranchised slaves.

One of the key contributors to Jamaica's education system has been colonialism. The attitude of the colonial government determined how they encouraged, undermined, or contributed to the education of the black masses. Their perceptions of the role that education could play to serve their interests also influenced their attitude to and recommendations for education (Bacchus, 1993).

This chapter explores some of the background and examines the history of the Jamaican education system that gave rise to the implementation and adoption of CXC examinations. This chronology is important to better understand the problems, pressures and policies that engineered significant changes in the system. This historical overview helps us to fathom the forces at work and comprehend how the system developed. The legacy of colonialism lingers and efforts to divest it have been unsuccessful, rendering the work of the CXC ineffective, in parts. The position taken in charting this development is in keeping with that of Miller (1990), that the education system was influenced by colonialism, nationalism, and structural adjustment policies of international lending agencies. However, from the latter part of the twentieth century into the twenty-first century, the major determinant of changes and policies has been globalization.

THE PRE-EMANCIPATION PERIOD (1655 – 1834)

Slave education

In the pre-emancipation era, racial and socio-economic divisions dictated educational provisions. The masses were black slaves with no formal education (King, 1999; Bacchus, 2005; Jules, 2010, Whyte, 1977; Mangan, 2012). Many planters were reluctant to allow their slaves to be educated because ignorance facilitated social control. Notwithstanding the view that education can help to maintain the status quo, (Bacchus, 1986; Barrett and Barrett, 2005), planters were mindful of the liberating and destabilizing effects of education (Bacchus, 1993; Greenwood, 1991). Inherent in this view is the ideology that reading promotes thinking which would have dangerous consequences in a slave society. Many planters viewed education as a tool to promulgate resistance and revolt (Gordon, 1963; Bryan, 1991).

Despite the planters' reluctance to educate their slaves, missionaries did. Naturally, they earned the distrust, ire and hatred of the plantocracy who were wary of the instructions and doctrines. Ideas such as equality of all in God's sight could be seed for rebellion against the status quo (Gordon, 1963; Barrett & Barrett, 2005; Greenwood, 1991; Barrow & Reddock, 2001; Greenwood & Hamber, 1981). Additionally, planters were against educating slaves because they could not be afforded time to pursue education (Bacchus, 2001; Barrett & Barrett, 2005; Whyte, 2000; Miller, 1990).

Education for Whites and Free Coloureds

It was among the elites that the foundation for the current education system was laid (Barrett & Barrett, 2005). In many cases, planters' children were sent to Europe to be educated (Black, 1983; Brown, 1979; Carter, Digby & Murray, 1984; Ragatz, 1971). Many did not return and those who did were unqualified for employment, as the education they received was totally unrelated to life in the colony (Gordon, 1963; Augier & Gordon, 1971; Ragatz, 1971).

For those unable to school their children in Europe, tutors and British curriculum were imported (Whyte, 1977; Bailey, 1997). The curriculum was irrelevant and unsuitable for the people's needs. In some cases, schools were established by churches or rich benefactors to educate students for local employment (King, 1979; Whyte, 2000; Miller, 1999b, Black, 1983; Augier & Gordon, 1971). These schools catered to whites and free coloureds – the latter being offsprings of black slave women and white men (Campbell, 1993; King, 1999). Black slaves could not attend (Gordon, 1963; King, 1979, Barrett & Barrett, 2005; Whyte, 2000).

Change in planter attitude

In the years preceding emancipation, planters' attitudes changed. They began to see the benefits inherent in educating blacks (Bacchus, 1986; 1990, 2001; Green, 1976). Education was seen as an agent of social control and an economic tool ensuring planters' productivity and wealth. England's decision to educate the

masses was also due to social and political actions in England and Jamaica (Barrett and Barrett, 2005).

Not only did economic concerns impact the education offered but political exigencies also motivated change. Planters were aware of the abolitionists' and the British Government's plans for emancipation; therefore, education was to placate blacks, so that when freed, harmonious relations would be maintained, and they would feel obligated to work for planters. This implies that despite the political push factors, the root of the decision was economic.

As the emphasis of the missionaries was to Christianize the population, religious knowledge was central; this did not cater adequately to slaves' needs nor helped them to develop their potentials and capacities (Bacchus, 1986, 2001; King, 1999; Jules, 2010). Efforts were made to produce relevant materials locally (Bacchus, 2001). However, these were irrelevant and had a moral and religious slant. The curriculum was still designed to maintain the status quo. Education met the spiritual needs of the missionaries, and the economic and political needs of the masters (Bacchus, 1986; King, 1979; Mangan, 2012).

THE POST EMANCIPATION ERA (1834 – 1865)

In the post-emancipation period, the British government believed that education could secure a smooth transition to freedom (Bryan, 1991; Miller, 1999b; Whyte, 2000). Thus, the Abolition Act, 1833, included a grant to provide education for Negroes (Augier & Gordon, 1971). There were approximately 65,000 children and the government had voted 2, 950 pounds sterling for their education – less than a shilling for each child's education. In 1833, only 22,000 blacks of the ¼ million in the island could write.

Missionaries were elected to administer the funds and ensure the Negroes' civility and subservience (*The Other World*, 2000; Jules, 2010; Turner, 2001; Bryan, 1991; Miller, 1999b; Bacchus, 1990; Turner, 2001; Barrett & Barrett, 2005; Campbell, 1993). They offered only elementary education, which facilitated the perpetuation of values that supported the class system as advocated by Functionalism (King, 1979; 1999). Both church and state colluded as "agents of liberation of the disadvantaged"; but both were "mechanisms of oppression" (Miller, 1999, p. 19).

Thus they both contradict the human capital theory, as education was not developing full human capacities. In the field of education, the human capital theory may be self-contradictory and does not take into account the ambiguities inherent in education policy in small plantation societies divided by class and race.

Two distinct systems of education developed – grammar schools like those in England, for the children of the plantocracy and a few blacks who were to support the colonizers in government positions (Bacchus, 1990). These educated blacks ensured that a native middle class was being groomed to protect property and attend to local social affairs (Augier & Gordon, 1971).

Concurrently, “an inferior elementary system” was instituted for the slaves (Bailey, 1997, p. 145). The technical role of education was highlighted and encouraged among blacks (Bacchus, 1990). Manual and domestic skills, household duties and agricultural instruction were provided (Bacchus, 1986; Augier & Gordon, 1971). Slave children were not expected to become leaders or administrators. Class and colour determined education and position in society. Education, as postulated by Functionalists, thus maintained the status quo. Colonial functionalism would be a useful concept to distinguish between this era and postcolonial periods.

The education system would serve socio-economic functions while fostering national development. The role of the masses to support the mother country’s industrialization remained. Education would serve an imperial function (Bacchus, 1990). Additionally, locals were supposed to be impressed by the superiority of the colonizer and become cognizant of their own inferiority and dependence on Britain (Augier & Gordon, 1971).

The period preceding Crown Colony Government was relatively inactive for education (Whyte, 2000). Education suffered; schools were inefficient; churches were left to finance education with minimum assistance from the authorities, who held the system hostage to the black-white dichotomy of power relations (Campbell, 1993; Digby, Murray & Carter, 1984).

The Morant Bay Rebellion’s Impact on Education

The Morant Bay Rebellion of 1865 demonstrated that social institutions had failed (Bacchus, 1993). To regain social stability, the authorities had to address the

socialising process to inculcate values that would secure acceptance of the status quo (Turner, 2001; Sidhu, 2006). Southard citing Kelly and Altbach (1984, p.1) noted that the education system of the colonizer was used to aid imperialism and extend dominance; “.... Colonizing governments realize that they gain strength ... through mental control” (Southard, 1997, p.1) echoing Gramsci’s notion of hegemony (Entwistle, 1979). That system imposed a sense of worthlessness on the colonized and the inadequacies of native systems were magnified. Post-colonial practitioners would be tasked with rewriting those imbalanced narratives.

Notwithstanding the efforts of church and state, only elementary education was available for the masses. Secondary education was provided for whites and free coloureds only (King, 1999). The prevailing argument was that “educating Blacks made them unfit ...for... agricultural labour” (Bryan, 1991, p. 118). These attitudes fuelled the disparity between blacks and whites and widened the academic and vocational divide.

Campbell (1993) contends that neither the British government nor the missionaries saw education as advancement but as a creator of unsuitable labourers. Issues surrounding the irrelevance of the curriculum and pedagogical problems were constantly raised (Green, 1976; Jervier, 1977; Gordon, 1998; and Jervier, 1977; King, 1999; Watson, 1982). This litany of complaints about inappropriate content was to dog the Jamaican secondary education system until the CXC examinations were adopted.

Despite this, a growing need emerged for elementary school graduates to access further education. This led black aspirants, missionaries, legislators and the plantocracy to embrace secondary education for all. However, only a few were thus privileged (Goulbourne, 1988). Missionaries wanted secondary education to have local ministers and an educated congregation. Legislators wanted native professionals and businessmen (King, 1979; Gordon, 1963). Educating the masses was expedient to prevent civil disturbances on the one hand, but on the other, they were impelled by “the inner logic of the capitalist system which aims at profit maximization through minimizing labour costs” (Bacchus, 1986, p. 13). Additionally, imperialists wanted to ensure that upon achieving self-government, there would be

“a comprador elite class whose orientations, concerns and interests would remain compatible with those of the metropolitan power” (ibid, p. 17).

CROWN COLONY GOVERNMENT - 1865 TO THE END OF THE CENTURY

The ex-slaves, keenly aware of injustices and discrimination, responded in open rebellion. After the Rebellion, Crown Colony Government sought to restore order. Educating the masses would ensure stability and economic prosperity (King, 1999). The school, “through its affective process”, would be required “to teach acceptance of the prescribed economic status ... industry, perseverance and continence” (Bacchus, 2001, p. 668).

The thirty years following the Rebellion were the formative years for secondary education (King, 1968, 1979; Barrett & Barrett, 2005). Government established a Schools Commission to administrate and regularize secondary education, to provide education for those unable to send their children to Europe (King, 1979; Miller, 1990). Poor blacks were still ignored; only the privileged middle and upper classes could afford fees. This dichotomy between whites and blacks, privileged and underprivileged, was to be the bane of secondary education for decades to come (Barrett & Barrett, 2005; Turner, 1979b).

Schooling was to erase social discontent, transform blacks from ignorant, uncivilized beings to docile, morally upright, obedient citizens whose industriousness would secure the elite’s economic prosperity. Changes in the content of syllabuses of Geography and History, and placing emphasis on the British Empire, ensured the primacy of Great Britain via education (Bacchus, 2001). To help the ex-slaves remember their status and position, agricultural and domestic training were promoted (King, 1979). This was not embraced by parents and teachers who wanted the academic-based education offered to whites (Turner, 1979a; Evans, 2001; Bacchus, 2005).

The colonial dichotomy between academic and vocational education saw school inspectors and commissioners complaining about the academic emphasis which was not preparing students to help with national development (Goulbourne, 1988). Then, as now, locally as internationally, intellectually capable students are

urged to pursue academic subjects; the less brilliant are herded into technical or vocational fields (Sahlberg, 2007; Ozga, 2011; Hodgson & Spours, 2015).

Declining economic conditions and disenchantment with the limited success of education led to cutbacks (King, 1999; Bacchus, 2001). But by the 1890s, world economic realities led British imperialists to “associate efficiency with education” (Bryan, 1991, p. 117). These views orchestrated adoption of the social capital theory as desirable for economic progress (Brown, 1979) and “empire’s welfare” (Bryan, 1991, p. 118).

In 1885, elementary school fees were abolished. Education was made free to all in 1892 (Jervier, 1976; Brown, 1979). In 1898, entries for the Cambridge Local Examinations, terminal secondary examinations administered from Britain, reached an unprecedented high; 328 candidates entered for the exam. Despite this, only one percent of the eligible students were accessing secondary education (Barrett & Barrett, 2005). Blacks, unable to afford the fees, were not among them (Brown, 1979; Jervier, 1976).

Education was one of the major social problems in the post Morant Bay Rebellion years. There were problems with costs, results, the curricula and the quality of teachers (Augier & Gordon, 1971). In 1881 the literacy rates were appalling. The figures presented in Table 4.1 from the Crossman Report 1883, highlight the situation:

Table 4.1 Education in Jamaica - the decades 1861 to 1881

Census of Year	Able to read and write	Able to read only	Total	#of children attending sch.
1861	50,726	68,333	119,059	33,521
1871	71,076	81,398	152,474	40,610
1881	115,418	115,750	231,168	67,402

Source: Augier and Gordon, *Sources of West Indian History*, (1971, p. 191)

Miller (1990) asserts that the situation mirrored the education pattern in England – the upper classes were being made educationally superior to the masses. In postcolonial terms, the educated were the powerful, representing the centre, while the uneducated were the powerless inhabitants of the margin. From 1833 to 1900, there were glaring disparities between the education offered to the blacks and that for whites and coloureds (Greenwood & Hamber, 1981).

There were 400 schools in 1867; by 1896 there were about 900. The number of pupils attending school was multiplied fivefold; yet, education was limited in quality and reach. Only half of the children of primary age were attending schools. Only 10 percent of the population over five years old were literate and less than five percent of pupils were educated at the secondary level. Most of those schools were fee paying and affordable to only whites and coloureds (Greenwood & Hamber, 1981). King (1999) reports that, “Inspector Keenan was to remain the lone voice calling for a Caribbeanized curriculum which would reflect the history, trade, resources and national phenomenon of the Caribbean” (pp. 42 – 43). This call would be answered by CXC.

THE EARLY TWENTIETH CENTURY YEARS – REFORMS IN THE EDUCATION SYSTEM

In the early twentieth century, the British government tried to localize West Indian education, but it remained European (Watson, 1979). The underfunded, ineffective system still preserved the status quo. Only one in every 80 children reached secondary school in the 1930s. However, despite the limitations and inadequacies, the system produced a cadre of West Indian leaders who saw the limitations of colonialism and were drawn to nationalistic movements (Watson, 1979).

Inspector Piggott’s 1911 education report highlighted gender imbalances, mismanagement of secondary schools, disparities and inequities in the system, and the elaborate and inappropriate curriculum at both the elementary and secondary levels. He recommended curriculum changes emphasizing the prominence accorded to Cambridge examinations which dictated curriculum and timetabling (Miller, 1990; King, 1979; Goulbourne, 1988).

The Secondary Education Law, 1914, stipulated academic and precluded manual subjects (Whyte, 1977). This was well-received among stakeholders (Bacchus, 1993). By 1914, the number of students in secondary schools had increased to 1, 432 from 842 in 1911. In 1915, the numbers stood at 1,519. The formal curriculum prepared students for the Senior and Junior Cambridge terminal examinations which were administered through British Examination Boards. By 1919, schools were filled to capacity and had long waiting lists; graduates were needed to fill civil service posts, for trade and the professions. Elementary school graduates who pursued vocational subjects were encouraged to pursue teaching careers (Miller, 1990). This ensured that the dichotomy remained between rich and poor, black and white, occupations, and social class.

Between the 1920s and 1930s, new frameworks were developed for secondary education. A brief period of economic viability followed World War I and facilitated improvement efforts. Unemployment resulted from too many graduates, who had pursued studies leading to the Cambridge School Certificate, chasing too few jobs (Miller, 1990; Bacchus, 2005).

The masses saw the link among education, occupation and status and realized that to achieve social acceptance and economic prosperity, they needed the education that their 'betters' received (Goulbourne, 1988; Greenwood & Hamber, 1980). These desires were not being met and the economic depression of the 1930s exacerbated the situation. Social ferment grew and the exasperated masses, seeing no improvement and assisted by burgeoning trade unions, again resorted to rebellion (Jervier, 1977; Lewis, 2004). The ex-slaves' efforts were buttressed by the middle class, who were excluded from Crown Colony government, and workers who had emigrated to fight in the war and seek employment abroad (Gordon, 1963). The ex-servicemen were embittered by the discrimination they had endured (Bacchus, 2005). Returning residents came with liberal views and criticized the system, demanding "...better education for the masses" (Gordon, 1963, p. 110). Garvey, with his message of Black Nationalism, advocated that education was the avenue for black man's advancement (Gibbs Beckford, 1999; Miller, 1990).

The 1938 Royal Commission, which enquired into the riots, "found educational provision as lamentably inadequate ..." (Gordon, 1963, p.111). The

Commission examined the social conditions and identified system inadequacies and irrelevant curricula, and concluded that the schools provided British education and “... educated the ‘fortunate’ few *away from* the unfortunate many and helped create ... a *plural society*” (Braithwaite & Phillips, 1972, p. 151). They recommended strategies to improve the socio-economic situation via equitable, relevant education for all (Greenwood, 1991; Braithwaite & Phillips, 1972; Greenwood & Hamber, 1981; Bacchus, 2005; Miller, 1990; Lewis, 2004).

Like the Marriott/Mayhew Report of 1933, the Royal Commission advocated for education that would change the outlook, values and attitudes of blacks who would become conscientious workers supporting colonial rule. The colonial policy was ostensibly designed to improve the skills and morality of the masses, but under the façade was the desire to maintain the status quo (Bacchus, 2005).

THE PRE-INDEPENDENCE ERA (1930’s – 1962)

Following the riots, the authorities decided to spend more on education as this guaranteed better social control than spending on the police (Bryan, 1991). Despite the lack of financial resources to effect requisite changes in education, those that were made resulted partly from the actions of the masses who clamoured for the opportunities that their white and free coloured counterparts enjoyed (Barrett & Barrett, 2005; Gordon, 1963; Bacchus, 2005). The ideas of Gramsci, as promulgated by Entwistle, also prove insightful to examine this phenomenon: “It is precisely the initiation of working-class children into the traditional mainstream culture which ... is most likely to lead to ‘a redistribution of rewards in terms of wealth, prestige and power’ ” (Entwistle, 1979, p.40, citing Young, 1971, p. 39). The Gramscian notion of hegemony is useful to explain the education system in the colonies. Power and stability were ensured through moral and intellectual persuasion. With the help of “social institutions, ... it was possible to control the subaltern classes” (Entwistle, 1979, p. 12, citing Joll, 1977). Miller remarked that it is amazing that people of African descent who were treated as inferiors were “brought into the western educational tradition [because of] their successful use of education as a means of mastery of the dominant culture in order to renegotiate their place in society” (1999, p. 21). This might not be considered amazing in light of other stories of poor Blacks

in the colonies who benefitted from education, revolutionized their lives and even challenged the establishment, resulting in brilliant post-colonial depictions of the margin writing back to the center (Ashcroft, Griffin & Tiffin, 1989). See for example *Black Shack Alley*.

By 1943, examination results showed improvement: 0.86 percent of the students sat the Higher School Certificate, 11.5 percent sat Senior Cambridge, and 6.5 percent sat Junior Cambridge examinations. Despite this, only 1.3 percent (3, 380) of the 10 – 19-year-old cohort of 255, 871 were accessing secondary education (Miller, 1990). The numbers who took the examinations were low, and the failure rate was high; yet they were used as the gold standard at the secondary level (Gordon, 1963). These examinations, administered by England, dominated curricula and were championed by visionaries as the foundation on which future political leaders would build. Cries for more realistic and relevant curriculum occasioned negligible changes; summative overseas examinations drove curricula. Later, CXC examinations would play a similar role.

In 1943, Kandel, an American educational professional, was commissioned to examine secondary education. He found nothing new: the Cambridge syllabi and examinations were external to the students' lives. In decrying the system of education that persisted in the post-emancipation era, Brown (1979, p. 89) spoke to what obtained for him as a student at Cornwall College, a prominent secondary school in Western Jamaica:

... there were no courses in West Indian history or literature, let alone Jamaican history or literature ... I never heard about Morant Bay, Frome or C. L. R. James, but I knew all about Churchill, Waterloo, and Westminster. I never heard about Roger Mais, Vic Reid, or John Hearne, but I was quite familiar with Keats, Shelley and Shakespeare. In biology and botany, I learned about oak and elm trees but the ackee, pimento and lignum vitae may well have been Martian.

Arising from the social unrest of the era, a new constitution was to be implemented giving Blacks a chance to participate in governance (Miller, 1990; Jules, 2010). Hammond's 1941 report had recommended that schools follow a curriculum to foster students' holistic development equipping them

for everyday life, in keeping with social and human capital theories; it went unheeded because of the emphasis on external examinations. Students were taught hardly anything about their own society and their social and psychological development were ignored. Hence, there was a weak relationship among education, students' abilities, and performance and societal needs (Bacchus, 2005). The recommendations of the Kandel report were accepted as policy. Students were still prepared for British examinations; as usual, the examinations determined curricula (Whyte, 1977; Bacchus, 2005).

In 1944, representative government and universal adult suffrage were achieved. These political changes impacted educational policies. Cognizant of education's role in development, the government devised new plans (Whyte, 1977). Nevertheless, the status quo was unchanged (Day, 1989).

The initial stirrings of nationalistic sentiments – education for development

The 1950s to 1960s saw significantly different reforms in education. In the first half of the twentieth century, education was used to advance imperialistic ends and to satisfy the local plantocracy. Now notions of nation-state and nationalism and the need to redefine and establish the Jamaican society, in keeping with this political ideology, drove educational reforms. The period 1953 to the 1970s was viewed as the development era (Miller, 1999b; UNESCO Report, 1983). The emphasis on secondary education was fundamental to supply manpower to have nationals replace expatriates (Miller, 1999b). Educational reforms were again enacted, despite competition for power and acceptance.

The government planned to increase secondary places by 160 percent. Prior to 1953, only 5 percent of the age cohort was in secondary school (Whyte, 1977). In 1950, there were only 8,000 students in the island's 30 high schools. By 1953, expensive boarding schools were converted to day schools. The government expanded access, built new schools and made education a right for all (Miller, 1999b). However, only 10 percent of the age cohort was facilitated. By 1959, enrolment had increased to 17,400 a 113.7 percent increase in five years (Whyte, 1977).

Comprehensive and junior secondary schools (the latter facilitated by a World Bank loan in 1960) were received unenthusiastically because they were viewed as sub-standard (Mitchell, 1989). Students in all age schools who passed the terminal Grade Nine Achievement Test gained entry to technical high schools. Enrolment figures for 1962-1963 saw 2,076 students in six technical high schools; 18,211 in secondary schools and 290, 505 in primary schools (Digby, Murray & Carter, 1984).

Yet the government opposition criticized the improvements noting the imbalance between access to Blacks and Whites (Murray, 1979). Nevertheless, post-colonial, nationalistic sentiments arising from independence fuelled changes (King, 1979). Independence impelled the need for democratizing and diversifying secondary education and expanding facilities for all (King, 1979). "A National Plan for Jamaica, 1957 – 1967" confirmed the new nationalistic agenda (Gibbs Beckford, 1999). Equality of educational opportunity was stressed. The 1957 – 1967 education expansion plan provided for Black children who were valuable human resources to ensure economic prosperity (ibid.). Local geography and history and business education were introduced. Technical, vocational and scientific education were facilitated to meet national developmental needs (Murray, 1979b). Self-government would require skilled, informed and knowledgeable citizens. The education system would infuse democratic concepts thus contributing to nation building. In this era, the key themes were, "nation building, expanding access, equality of opportunity and nationalism or regionalism" (Miller 1999b, p. 200).

Yet the curriculum was driven by British examinations. Gibbs Beckford (1999, p. 18) cited Manley (1974, p. 21) who noted that the education system was "imported lock, stock and barrel from England without a moment's thought to its relevance to Jamaica's needs and aspirations." Miller (1999b, p. 222), reported that "in the biological sciences most of the species did not occur in the Caribbean except in the syllabi and textbooks." The imperial culture was still promoted. To entrench notions of nationalism, responsibilities of citizens and emphasize allegiance, it was necessary to reform the entire curricula.

THE INDEPENDENCE ERA – THE INFLUENCE OF NATIONALISM

Introduction

Political independence in 1962 heralded a new era. The new government's priority was developing the education system. Colonialism and imperialism would no longer dictate education; nationalism would. But, was this really the case? Bacchus (2005) contended that those countries that gained independence initially were those that the British government thought would maintain the class and race dichotomy. Political leaders, schooled by the colonial masters, having embraced imperialism, were viewed as allies of the Crown who would perpetuate colonialism and impede the masses' progress. However, pressing local conditions forced the governments to develop social services, especially education. The masses clamoured for changes which led to educational reforms (Bacchus, 1990; Jules, 2010). Although inherited features persisted, nationalism and state ascendancy superseded colonialism (Barrett & Barrett, 2005; Miller, 1999a; Jules, 2010).

Independence fostered awareness of the importance of developing human resources through reforming the inherited education system (Whyte, 1977; King, 1999; Carter, Digby & Murray, 1967). The human capital theory was adopted to ensure maximum economic benefits, national progress and the creation of a formidable nation. This would become the People's National Party (PNP)'s mantra for decades.

Internal and external policy-led efforts of government

Students' skills and abilities were to be developed to facilitate the national agenda. Consequently, the government tried to link education with socioeconomic development policies (Jude, 2002). Success rates in the Jamaica Local and the Jamaica Certificate of Education terminal examinations administered by the government were poor. In the former, 17 percent of the 10, 841 students were successful and in the latter 18 percent of the 212 passed. Many students sat GCE examinations; the results were disappointing (Ministry of Education, 1962).

The New Deal in Education – World Bank Project

In 1966, the Jamaica Labour Party (JLP) introduced the “New Deal” in education (Miller, 1989). This World Bank financed project resulted from a UNESCO mission mandated in 1964 to define the educational needs and make recommendations (Lindsay, 2002). The project promised expansion, improvement, “quantity, quality and diversity” (Manley, 1975, p. 103); it did result in expansion throughout the secondary education system. Sadly, though, it seemed that Jamaica had replaced one master with another, due to lack of finances (Miller, 1990; Manley, 1975). This would start an interminable dependence on bilateral and multilateral agencies such as the World Bank, UNESCO, IDB, USAID and CIDA to develop education (Jamaica’s Five Year Development Plan, 1991). Jervier (1976, p. 163) added: “Nationalism ...ha[d] to be tempered with pragmatism and sound judgement.” In many cases, conditions attached to these loans and grants perpetuated the system that operated under colonialism and added to Jamaica’s fiscal problems. The result was underdevelopment (Miller, 1989; Bacchus, 1990).

Fifty new junior secondary schools catering to industry demands and offering practical subjects were built (Whyte, 1977; 2000). The curriculum was reengineered to equip students with employable skills and attitudes, to ensure personal and social development and the country’s economic productivity (Abbott, 1980). Despite this, the UNESCO report of 1970 criticized the system’s content, structure and methods as still totally unsuited to society’s needs. Graduates were ill-prepared to deal with modern life, as knowledge and skills acquired in schools were inadequate to facilitate national development (Abbott, 1980).

Efforts were made to mend the breach created and expanded under colonialism, but it was inadequate. The elitist divide still existed between rich and poor, rural and urban students, traditional high school and all the others (Jervier, 1976). The lower classes were being prepared for agricultural and domestic fields while the others pursued an academic education preparing them for white collar jobs (Murray, 1979; Evans, 2001).

Despite all these reforms, the summative assessment was still Cambridge examinations which only a minority pursued (Miller, 1999b). The elite were still the chief beneficiaries, achieving the ‘gold standard’ of success which secured them the

best jobs, placed them in a higher socioeconomic class, guaranteed prestige and/or led to further academic pursuits (UNESCO, 1983). No efforts were made to replace the examinations because of their prestige and economic feasibility. They were believed to be more impartial and since the acquisition of qualification from “the center of the empire” elevated their beneficiaries, they were ideal (Jervier, 1977, p. 14). Postcolonial questions about margin and centre, legitimacy of the dominant versus the illegitimacy of the dominated beg to be asked.

The PNP’s Thrust of the Seventies (Thrust) – free education for all

By 1972, general elections brought the PNP to power. The new government again presented new policies and perspectives, objectives and strategies; they introduced the “Thrust of the Seventies (1973)”. The first sentence of the Thrust demonstrated the government’s focus and their acceptance of the Human Capital Theory: “Jamaica’s greatest resource is her people” (p. 1). Government’s policy was “to develop effective educational programmes so that young people can serve the needs of their own community and the nation and ... [secure] better levels of living” (ibid.). In his assessment of the education system, Prime Minister, Manley noted: “The system offers courses that reflect the social prejudices ... inherited from the past and bear little relationship to the kind of economy which we must seek to build” (1975, p. 158). He confirmed that the legacies of colonialism impacted the divisive nature of the system which required concerted efforts to ensure progress (Manley, 1975).

This new programme promised curriculum reform, teacher training and free education to all (Nkrumah et al., 2010). More students received places in secondary schools. The developments would ensure students’ preparedness for nation building (Whyte, 2000). ‘Free education’ meant that poor Blacks, previously barred from high schools due to costs, would now access secondary education; but the disparity remained between new secondary and traditional high schools (Turner, 1979b).

Only those who passed the Common Entrance Examination (CEE) would gain access to high schools and the middle class. This examination was also imported from Britain and favoured the elite (Jervier, 1976). People objected to it because of

the inherent social class bias. In the 1974/75 academic year, the placements of students who had taken the CEE proved that lower class children were still being left behind: 30,699 sat the examination, 27 got scholarships and 4,751 got free places (King, 1979). Children from prep or private primary school had a better foundation and were better prepared than poor children from elementary schools (Hamilton, 2001). Substantial changes were not easily effected; only a few working class children earned high school places (King, 1979). Consequently, only 8 percent of the age cohort were in high schools and of the 30,876 papers done in GCE O'Levels in 1972, only 14,433 were passed and of 4,900 candidates only 1,183 passed five or more subjects (Thrust, 1973).

Between 1953 and 1978, enrolment in secondary schools moved from 8,000 to 170,000, and in the high schools from 8,000 to 50,000. Early in the 1970s, fifty new junior secondary schools were built with the help of a World Bank loan. These schools initially catered only to the first three years of secondary education (Digby, Murray & Carter, 1984; Black, 1983). Later they were upgraded to provide five years. Yet only 60 percent of the age cohort was obtaining a secondary education (Miller, 1999b). Only 800 students went on to sixth form to pursue Advanced Level examinations. There the pass rate was only 41 percent of all papers taken (Thrust, 1973).

But Manley, in his budget speech of 1973 had announced that the educational changes would ensure that the population lead better lives, serve their communities and nation and foster economic growth (Abbott, 1980; Jones, 1996). The government, noting the deficiencies in the education system, committed to producing suitably qualified middle and higher manpower professionals. Technical and agrarian training would be improved. The rich/ poor disparity would also be addressed since the Thrust's fundamental tenet was equality of educational opportunity for all (Miller, 1999b).

In 1973, a new team of external and local experts produced "Jamaican Education Sector Survey". The constraints identified included the irrelevant curriculum. Recommendations included "curriculum reform designed to improve the content, range, relevance and quality of education" (ibid., p. 105). From this survey, "The Five Year Education Plan 1978 – 1983" was devised. The Plan aimed to

improve the system and prepare individuals for life and the working world. New textbooks were written incorporating Caribbean material to address relevance (Digby, Murray & Carter, 1984; Black, 1983). Under Manley's socialist government, nationalistic, postcolonial efforts were made to transform Jamaica's social infrastructure (Lindsay, 2002 citing Stone, 1986).

The government addressed examination procedures, highlighting the importance of overseas examinations in students' future, despite their high failure rate and limits imposed on curricula (Thrust, 1973). The UNESCO team (1983) also complained about the irrelevance of content, assessment and deliverables of GCE examinations.

Internal examinations also had problems; the Jamaica School Certificate (JSC) was almost unrelated to the educational stages, yet it was pursued by future professionals. This examination had the highest failure rate. The UNESCO Report (1983) indicated that between 1977 and 1981, 52 percent to 70 percent of the students who took these examinations failed all subjects. Only between 0.2 percent and 0.7 percent gained full certification.

For the Advanced Level examinations, the best results between 1977 and 1981 were in English, Mathematics A, Mathematics B and Chemistry. Erratic success rates were experienced in Geography, Pure Mathematics, Chemistry, and Botany. There was a steady number of entrants overall, except for Mathematics B and Biology which experienced steady increase and Botany and Zoology which saw a steady decrease (UNESCO, 1983; see details of these results in Appendix 2).

Sangster (1986), analyzing A Levels, criticized the poor pass rate and lamented students' non-engagement with the system. He detected inconsistencies in the use of A' Level results as a selection device for university studies and called for a rationalization of its use or its substitution with accreditation through the university and CXC. This call was answered when CAPE was introduced. Whether or not these examinations have successfully replaced the A' Levels will hopefully be clarified by the data that have been collected and analyzed in this research.

Reforming secondary education aided by the World Bank

Much effort was expended reforming secondary education. Again, the resources came from an external agency - The World Bank - which influenced government policies. Despite promising equal opportunity for all, it was an unequal system marred by race, class, gender and the rural/urban divide, which offered a broad-based primary education for all, a divisive secondary system that engendered strife and a narrow tertiary system (Miller, 1999b).

The emphasis was on the junior secondary (renamed new secondary) schools which were built in the rural areas and aimed at preparing graduates for work or further education. Miller's (1999b) claim that in the 1990s Kingston had 35 percent of the population, but 50 percent of students in the traditional high schools highlights the disparity. Those in the new secondary schools pursued vocational and continuing education, primarily non-academic subjects, unlike high school students. The dichotomy was still firmly entrenched and was unacceptable to the masses.

The new secondary schools were products of external agencies; reforms were recommended by UNESCO and funded by the World Bank (Miller, 1999b; Lindsay, 2002). These schools perpetuated the old elitist system and were welcomed by the upper classes as they facilitated the established colonial dichotomy between races and classes (Bacchus, 1990). Their curriculum was localized; the government produced summative examinations – the Secondary School Certificate (SSC). This was still experimental, and the qualifications were rejected by stakeholders. On the other hand, the high, comprehensive and technical high school students sat the Cambridge Ordinary and Advanced Level examinations and were more likely to get prestigious jobs, advance through the professions or pursue tertiary education (Murray & Gbedemah, 1993).

Further reforms via political party policies – JLP's Action Programme

The JLP government of 1980 again developed their own program to replace those introduced by the Manley-led PNP: an "Action Programme for Education 1980 – 1984". Specific action included seeking external funding (neo-colonial dependence revisited) to facilitate the rationalization of secondary education and the introduction of a unified grades seven to nine curriculum. However, substantial

development in education was hampered by the change in governments, lack of vision and poor implementation of plans.

THE STRUCTURAL ADJUSTMENT ERA (1970s – 1990s)

Introduction

The 1970s – 1990s can be described as the Structural Adjustment Era during which the government focused on cost reduction and limited public expenditure as mandated by the International Monetary Fund (IMF) (Lindsay, 2002; Miller, 1999b). This led to the undermining of some educational projects (UNESCO, 1996; Goodwin, 1988; Lindsay, 2002). The enthusiasm and bright optimism of the nationalistic era were replaced with harsh economic realities, and “social retrogression”, which occasioned government’s arrangements with the IMF (Miller, 1999c). Many reforms aimed at improving the quality of life for the poor through education (Miller, 1999b). Quality and efficiency, expanding technical and vocational education, teacher education and changing instruction methodology were highlights of the era. Funding for a book rental scheme for secondary school students was, interestingly, secured externally - British Development Division, Caribbean of the Overseas Development Agency. Some may say that it was justified; others that the dependency syndrome never ended and is still part of Jamaica’s problem.

The genesis and development of Jamaica’s relationship with CXC (1973 – 1990s)

Again, there was talk of reforming the curriculum to reflect local content and culture and realize national aims. National and regional assessments were debated focusing on international and local appeal, acceptance of qualifications, costs and integrity. Based on unpleasant experiences with SSC examinations, regional examinations were advocated to be of a higher quality and more cost effective.

By 1973, the government decided to invest twenty-three thousand, seven hundred and forty dollars (\$23, 740.00) in the establishment of the CXC. This was rationalized based on the relevance of the Council’s offerings to national development (Thrust of the 70s). The perennial issue of the alien, unrelated curriculum was to be settled. A curriculum introducing local content, relevant to the context and aims of the nation was to be embraced. The “Jamaicanizing” and

“Caribbeanizing” of education emanated from nationalistic sentiments that pervaded the post-independence era. Among the achievements of this period was the government’s successful integration of appropriate curricula for the population incorporating local history, geography, and Caribbean literature. It is desirable to evaluate the extent to which CXC managed to fulfil its mandate. This is a task which is being undertaken by this research.

Embracing the CXC did not solve the problems of secondary education (Miller, 1999b). Although the curriculum was more relevant to regional needs, the problems would persist because of the nature and structure of the system. It was no wonder then that seven types of secondary schools existed when Strudwick and Foster (1991) started their cohort study of fifth formers in 1984. They reported that only 16 percent of the students who sat the CEE went to the elite secondary high schools thus gaining access to tertiary studies and occupational mobility. They concur with Thompson (1996) that the colonial system was still firmly entrenched. Despite the rigid social stratification and disparity among the classes, they reported progress in literacy level and expansion in the system, notwithstanding the vagaries of the international economic market which negatively impacted the country.

Initially, performance in the CXC examinations was positive; entries for GCE examinations decreased with a concomitant increase in entries for CXC. Interest and performance in the academic subjects were marked by students’ success. Only 10 percent sat vocational or technical subjects. There was an impressive growth in the CXC offerings from only five subjects in 1979 to 11 in 1980, 13 in 1981 and 21 in 1982 (Strudwick & Foster, 1991). The number of entrants had increased rapidly over three years because schools had replaced GCE with CXC; most students entered at the General Proficiency Level.

The UNESCO Report

The Minister of Education invited UNESCO to make suggestions for improving the secondary system; they had earlier recommended the changes that resulted in the existing state (Miller, 1990). In 1983, the UNESCO Report highlighted the issues of inequality, inefficiency, and irrelevance. The study revealed that 25 percent of grade 7 – 9 enrolments were in high, technical or comprehensive high schools and

only approximately 50 percent of the age cohort attained grades 10 and 11 education. Inadequate time allocation for key subjects, inexperienced teachers, lack of practical experiences and non-adherence to the curriculum guidelines were among the problems. Many of the 50 percent of primary school leavers who had enrolled in all age schools did not access education beyond grade nine (UNESCO, 1983).

Summative examinations were still driving curriculum. CXC qualifications had more social currency and prestige than SSC certificates which were not meeting graduates' needs. Employers complained about illiteracy and the trainability of graduates who lacked suitable knowledge and technical expertise to function in the workplace. The report revealed that employers preferred school leavers who had been successful in academic subjects; these were more amenable to training than those from the vocational or technical areas. The latter lacked requisite literacy and numeracy skills. This was a sad indictment on the system which aimed to prepare students for the working world, stem unemployment and contribute to national development, economic and social prosperity.

The “Five Year Development Plan”

The government, in their “Five Year Development Plan” (FYDP) of 1990 – 1995, reported that the curriculum for grades 7 – 9 had been restructured and incorporated necessary skills to facilitate national, social and economic growth, and functioning in the twenty-first century (FYDP, 1991). Government embraced the views of Functionalists and Human Capital Theorists regarding the value of education in securing national success. Acting on the UNESCO report of 1983, the government committed to human resource development, providing education responsive to and satisfying the demands of employers.

Whyte (2000), in her critique of the plan, noted that the reduction in government expenditure on education due to economic constraints had led to the erosion of the quality of education. Nkrumah-Young et al. (2010) concur, pointing to the decrease in revenues from the bauxite and alumina industry that led to serious pressures on the education system. The achievement levels of graduates were

inadequate, and there were shortages of qualified graduates with mathematical, technological and scientific skills (Whyte, 2000).

The secondary system was still disjointed and segregated with six different types of schools pursuing diverse programmes. The government's plan was to diversify the curricula which were greatly influenced by external examinations and establish vocational programmes to facilitate employment skills. Their appraisal revealed that many students from poor, rural communities had no access to high nor new secondary schools. They completed their education at grade nine and were precluded from sitting CXC examinations (FYDP, 1991).

Yet, regrettably, there were no plans to assist those students beyond grade nine; the emphasis was on improving education to keep abreast with local and international developments and standardizing the programme at the lower levels to facilitate equity among graduates. Subjects aimed at developing cultural awareness and acquiring positive values were introduced to improve self-image, create productive citizens, drive economic development and facilitate success. The government was confident that developing human resource would ensure transformation and sustainability (FYDP, 1991).

The Reform of Secondary Education (ROSE) Programme

An effort to change the fragmented, divisive nature of secondary education led to the introduction of the ROSE Programme which was implemented in 1993 and funded by the World Bank; it was designed to improve access and offer equal opportunities for all students at the first phase of secondary education – grades seven to nine. New secondary schools were upgraded and renamed; technical, comprehensive and traditional high schools remained. Some all age schools were upgraded to junior high schools (Miller, 1999b). The ROSE programme offered a new integrated common curriculum with emphases on literacy, numeracy, resource and technology, science, and career education. It was intended to help ensure that graduates were prepared for the working world and life challenges. In defending the ROSE curriculum, then Minister of Education, Burchell Whiteman, highlighted the relevance of the programme to the real world and the role it played in establishing

relationships and linkages among subjects. This foundation would enhance the students' performance at CXC examinations and in the working world.

Summary

Despite government's efforts, the performance of students on CXC examinations was still below par. The Council was working to improve their offerings and achieve their objectives but the inherited problems hampered progress. The academic versus vocational divide, grammar school versus secondary school, and the privileged versus the underprivileged dichotomies ensured that progress was stymied.

THE GLOBALIZATION ERA – 1990s TO THE PRESENT

Introduction

With the beginning of the twenty-first century, the Jamaica government adopted policies and implemented strategies to fit the population for globalization. Government affirmed that educating the society was a priority to ensure Jamaica's movement to control her destiny "rather than remaining on the periphery as a developing country" (Muschette-Kirk, 1999, p. 1).

"Education the Way Upward"

In their 2001 policy document, "Education the Way Upward" (EWU), government reaffirmed the importance of human resources to success. Whiteman championed the importance of vocational and technical education and training, science, and technology in securing national growth and development. Thus education and training became the nexus of the strategy to develop "a creative, productive, democratic and caring society... [to] prepare citizens for changing roles in a social, economic and global environment ... " (EWU, 2001, p. 1). The view espoused, like those of the World Bank, UNESCO, Functionalists and Human Capital Theorists, was that building human and social capital would ensure human

development which would lead to economic growth, social peace and stability which would expedite improved and sustainable quality of life.

The government admitted that the population did not possess the education, training, and skills that globalization and its inherent competition in trade across nations demand. Whiteman affirmed that they had consulted employers to ascertain their needs and requirements. To provide the desired skills, subjects taught in schools were tailored to meet workplace demands. Whiteman, as reported by Harris, rationalized that “globalization and the free market had engendered increased competition among businesses, resulting in employers making demands for a competent workforce, with the appropriate job-related skills” (1996, p. 1). Thus, the government pledged educational improvements to secure economic viability. The extent to which this was realized may be revealed through data presented and analysed in Chapter 7.

Once again, the education system was viewed as the panacea to cure societal ills. However, if the infrastructure and support systems are not in place, as Gift (1996) suggested, then there will never be qualitative improvements. The government’s emphasis seemed to be rooted in quantitative returns: five years of secondary schooling for all who enter grade 7 from 2003; and 5 percent annual improvement in the number of students passing Mathematics and English in relation to students sitting the examinations.

Interestingly, this was not to be linked to the age cohort which would have provided a better picture of the success or lack thereof. The government also pledged to spend at least 15 percent of the national budget on education. In recognition of the migration patterns of globalization, the government echoing developed nations and other small states as explored in Chapter Two, committed to educate and train students to function globally (EWU, 2001).

Undoubtedly, globalization contributed to government’s education policy decisions. Initiatives included upgraded and additional facilities at the secondary level, new curricula, improved training of teachers and the introduction of technical and vocational education through the Human Employment and Resource Training /National Training Agency (HEART/NTA). Technical support was provided for secondary schools. The government realized that rapid technological changes in the

local and global economy mandated that skilled workers be trained for the productive and service sectors (Davis, 2004; Planning Institute of Jamaica, 2009; Ministry of Education, 2008). They realized the huge task involved with providing appropriate training and facilitating the development of graduates who could contribute positively to the economy. Performance in CXC examinations was described as generally satisfactory in a range of subjects; Mathematics and English results were below desired levels.

The ROSE programme was to be continued to ensure equity across grades 7 – 9 and a junior high school curriculum would be introduced across schools; a junior high school certificate would replace the JSC and the Grade Nine Achievement Test. Yet the classification of schools showed that inequalities and disparities persisted.

Internal pressures and assistance from local entrepreneurs also influenced changes in the education system (Sector Plan, 2009). To meet globalization's demands for technologically savvy employees, business partners assisted the government with introducing computer labs in schools. In 1995, in a new type of initiative among government, donor agency and community interest groups, the government received a grant from the IDB to help with computer-assisted instruction. Additionally, the National Commercial Bank, in partnership with the government, has paid more than J\$118 million for CSEC fees for Principles of Accounts and Principles of Business for 92,313 eligible students in 114 schools since 2003 (NCB, 2010; *The Gleaner*, 2016).

As part of the education transformation process, a task force was established to present an action plan to create “a world-class education system which will generate the human capital and produce the skills necessary for Jamaican citizens to compete in the global economy” (Davis, 2004, p.1). The task force report highlighted deficiencies in the system and the need to effect changes to meet the Key Outcome Goal for Education. The National Shared Vision for Education in Jamaica was comprised after islandwide consultations, to gain stakeholders' input into the creation of a system which “produces full literacy and numeracy, a globally competitive, quality workforce and a disciplined, culturally aware and ethical Jamaican citizenry” (ibid., p.3).

By 2008, the Ministry of Education published their National Report, which summarized their progress and efforts to implement the recommendations of the 2004 Task Force. While highlighting the accomplishments in providing additional spaces for students and increasing access and enrolment from 74.8 percent in 2003 to 78.3 percent in 2007, the report highlighted concerns about graduates' abilities and success rates in English Language and Mathematics. In 2007, 51.6 percent of those who sat English Language passed it and 35.3 percent passed Mathematics. In 2008, 54.4 percent and 43 percent passed English Language and Mathematics respectively.

While reaffirming the government's commitment to international treaties and agreements including World Declaration on Education for All and the Convention on the Rights of the Child, the government reiterated their obligation to improve the island's human resource capacity through guaranteeing equal access for all. However, by December 2008, the Executive Director of the Education Transformation team announced that the 2015 targets would not be met. This sparked outrage from various stakeholders including Dr. Dennis Minott, who had been a member of the task force, and former Minister of Education, Maxine Henry-Wilson. Four years later, key recommendations were not implemented (Wynter, 2009).

By 2009, the Education Sector Plan 2009 – 2030, a part of the long-term plan to help Jamaica attain developed country status by 2030, was produced by the PIOJ. The first sentence of the document echoes previous sentiments regarding factors that impel small states in the global economy: "Education and training are emerging as key drivers of a country's competitiveness" (2009, p.1). Additionally, the government avowed their awareness of a world impacted by globalization. Like countries that are changing their education systems globally, the Jamaican government confirmed education's role in economic and human capital development and pledged continued investment in education.

This writer embraces and recommends the ideas of Gift (1996) for creating responsive curriculum to foster development in Caribbean states. Performance at the secondary level is poor and too few pupils advance to tertiary studies (Gift, 1996). The Jamaican education system has challenges and development is lagging

behind because like other small states they are trying to respond to global trends with limited resources in a quantitative and not a qualitative way. For qualitative improvements, changes in content, curriculum and student support, and a reduction in social inequality are recommended (Gift, 1996). Unless these are addressed, there will be continued negative returns in education. Like the Caribbean heads of state had done in 1961, as reported by Figueroa (1962), Gift (1996) also defines the image of the Caribbean graduate and provides a list of qualities that they should possess. See Appendix 3.

The demands of globalization require changes in education systems. However, education should also help students to mediate their reality while embracing the values and attitudes upon which society was established. So while promoting the acquisition of indispensable skills and competencies to survive globally, the government tries to promote wholesome values and attitudes among secondary school students (Miller, 1999c). The data collected for this research may help us to evaluate how successful this has been.

Despite restructuring the education system in the 1998-99 academic year (Cummings & Morris, 2004; National Council on Education, 2005), the current secondary education system is still an amalgam of various types of schools. Most prepare students for CXC examinations; a few still sit GCE examinations (Miller, 1990; 1999b; Evans, 2001; Barrett & Barrett, 2005). However, at the upgraded high schools, students are still prepared to sit the government's SSC examinations despite the fact that most of those who gain terminal qualifications cannot find gainful employment; thus many have started to view secondary education and qualifications as unnecessary for success. This problem is exacerbated by the images created by the music and media industry where success seems to be associated with people who are not necessarily academically inclined (Evans, 2001). The education system needs to incorporate media studies, the teaching of life skills and citizenship, conflict resolution, mediation and peace to help prepare students for the world.

Miller (1999c) recommends that the government restructure the education thrust or focus to enable citizens to compete globally, and it seems as if this is being done at a policy level. Miller's advice that regionalism must replace nationalism if we are to survive in this economic climate, seems to have been heeded as well. The

CXC, as a regional body is a unifying agent but the extent to which it has been successful in helping to meet national aims and prepare successful graduates for the global environment is yet to be assessed. This research project will bridge this gap.

Jervier (1997) in his evaluation of the Jamaican education system referred to the model created by C. E. Beeby to categorize educational growth in developing countries. There are four stages: Stage 1 Dame Schools, Stage 2 Formalism, Stage 3 Transition, and Stage 4 Stage of Meaning. (See Appendix 13 for details). During the pre-emancipation era, the education system in Jamaica fitted perfectly in stage one. Stage two encompasses the post-emancipation to independence era. In the 1970s, Jervier positioned Jamaica at stage three with features from stage two still evident. I propose that in the twenty-first century, the secondary system has graduated to stage four with features of stage three still evident.

Summary and Conclusion

This chronological account of the ubiquitous nature of education and training demonstrates the various roles that education has played in the history of Jamaica's secondary education system. In the pre-emancipation era, education was used to serve religious and economic purposes; the post-emancipation era saw education meeting social ends; the early nineteenth century required that education helped to meet the colony's economic needs. By the mid-twentieth century, education was harnessed to serve postcolonial, political ends to establish the nation state. By the end of the twentieth century, relationships with international agencies and global trends dictated that education help to further economic development. Invariably, changes in the social, political and global environments impact changes in the education system (Miller, 1999c).

Consequently, the successes and weaknesses of Jamaica's relationship with the CXC must be analyzed against the backdrop of the historical information. Despite the best efforts of the examining body, internal policies, pressures and problems, inherited from colonialism and evident in the present, continue to determine education outcomes. In addition, neo-colonial overt and covert policies drive the Jamaican government to address educational provisions. Currently, the

demands placed on the system are great as this era is viewed as the knowledge society; education must play leading role in preparing the nation to acquire and use knowledge to maximize economic potentials globally. Despite embracing CXC examinations which focus on more relevant content than their colonial predecessors, not all national needs are addressed as the system still emphasises terminal examinations which are designed for the entire region.

Examination and curriculum are inextricably intertwined. Curriculum should dictate examinations. However, this has not obtained in small states. In preparing students for external examinations, many nations, like Jamaica, have used the syllabuses as curriculum for their students. If national curricula are supposed to foster national goals and aims as postulated by Functionalists, then curricula adopted for examination purposes may railroad national emphases. Bacchus (1986) responding to Bowles and Gintis (1976) insists that the “correspondence theory” which holds that education is a mechanism for social reproduction equipping students to fit into the social and economic structures of society, does not apply to the Caribbean reality. Despite soliciting inputs from governments and teachers from each country, no one country dictates changes that CXC makes. This researcher shares Bacchus’ views that there is and was a “... multiplicity of factors” and varied “dialectical process” were involved in the development” of curricula in the British West Indies (1986, p. 10). Undoubtedly, the colonial system and post-emancipation attempts to harness education as an economic tool have had a tremendous impact on the current system. However, the changes that CXC have made were not because of, but in spite of national goals and requirements.

Education in Jamaica serves diverse functions and has evolved. Human capital theory, Functionalism, Social Intent Theory, Human Development Theory all apply. Invariably, nations expect their education systems to develop in their citizens desirable traits to facilitate national advancement. This was not always the case as planters and colonial rulers had their own political and economic agendas. In modern society, the emphasis is on globalization and education’s role in the global environment. In the British West Indies, the masses consider vocational education to be inferior to academic pursuits. This was inherited from the post-emancipation era when the planter class designed education to keep the masses in their

designated social and economic milieu. Thus, many still spurn vocational and lobby for academic education.

However, global economy now requires workers who are both academically and vocationally skilled; this pressures nations to tailor their education systems to bridge the academic/vocational divide. This is necessary for graduates to function in the global economy which requires rapid transfer of skills and services across barriers using information technological devices. Notwithstanding this, nations must still try to ensure that their education systems meet their internal needs.

Like many small states, Jamaica is the beneficiary of centuries of colonial rule and an inherited education system which enforced the dichotomy between rich Whites and poor Blacks. This system saw Jamaicans from the lower strata sitting local examinations, which have no international prestige and do not ensure entry into the coveted professions or tertiary institutions. The privileged few from grammar schools were entered for Cambridge examinations. General criticisms were that these examinations forced students to follow an alien curriculum and did not prepare them to be civic-minded nation-builders. In the 1970s, nationalism permeated the Caribbean. Nationalistic sentiments led leaders to agree to implement examinations that were more relevant to the needs of Caribbean students and facilitate national development. This gave rise to the CXC, which sought to provide a local education and examinations incorporating assessment procedures that were different from those of the former examining boards and more in keeping with the nationalistic ethos. Despite these efforts, a new phenomenon, globalization, has impacted on and contributed to government policy regarding education since the last decade of the twentieth century. The extent to which this has affected the education system needs to be explored and the effects on students sitting CXC examinations may be insightful.

Since its establishment, the CXC has introduced varied examinations at General, Basic and Technical proficiency levels. The introduction of the CAPE Examinations which replaced GCE Advanced Level examinations has helped to cement the postcolonial departure from British examinations. Jamaica has embraced the examinations, and the government has mandated that students in secondary schools sit them. This has ostensibly ensured that the ties between the

Jamaican examination system and the Cambridge Examination Board have been severed.

It is necessary to examine the efficacy of the CXC examinations as mixed reactions have persisted regarding their performance. In key subjects, students continue to perform poorly; yet, in non-traditional areas they excel. To what extent is this replicated across the secondary school curriculum? This research aims at assessing the extent to which the examinations offered by the CXC have successfully replaced GCE Examinations. This success is to be gauged by assessing the extent to which CXC has bridged the colonial divide and achieved the intended aims of the architects: providing an examination that speaks to nationalistic, post-colonial, regional developmental goals; replacing the overseas examination boards; allowing access to more students, and preparing graduates for the global market. In the ensuing chapter, we examine the theories that underpin the research.

CHAPTER FIVE

THE THEORETICAL FRAMEWORK

Introduction

We now interrogate the main theoretical concepts that underpin this research. Various theories could be considered in light of the aims and the research questions. However, the scope of the thesis does not allow for discussion of each, so primacy is accorded to postcolonialism as it is seminal to the argument, that small postcolonial states must interrogate and overcome varied inherited and imposed policies, problems, and pressures that impact their education systems. It is also important to note that post-colonial states grapple with globalization, because of its linkages to colonialism, and its impact on them as they try to assert themselves, chart their own destinies and rewrite their own narratives.

Imperialism/Colonialism

It is important to mention, even in passing, the theory of imperialism because postcolonialism is a direct response to imperialism. Under colonialism, imperialism thrived, as developed countries imposed their will on small states. Much of the developing world, including many small states, was subjected to imperial powers that dictated education systems (Rush, 2011; Burnham, 2008; Kohn, 2012). Chapter Four provides details of Jamaica's case. The demands for markets for manufactured goods and for investment drove imperialism which involved plundering the wealth of nations, engaging in unequal trade relations and using slave labour to produce wealth which provided economic advantage for the imperial power (Parenti, 1992 – 2005; Mangan, 2012; Halsall, 1997, citing Hobson, 1948; Kohn, 2012). That achieved, the imperial power then embraced free trade to maintain economic dominance.

Imperialism focuses on the inequalities that small states experience in the New Economic International Order (Aggarwal & Weber, 2012; Golub, 2013, UN, 2010). Even though, technically, imperialism ended, it has been replaced by a subtle, perhaps more destructive economic system (neo-colonialism, globalization) which breeds social inequities resulting in further underdevelopment in small states. These social inequalities encompass not only economic issues but also those relating to

status and power. We now turn our attention to the exploration of the main theory that guided this research.

Postcolonialism/Anticolonialism/Neo-colonialism/Decolonialism/Neoimperialism

By far the most useful theory to apply to explain or justify contemporary education systems in small states, while critiquing inherited colonial education systems, is postcolonial theory in its diverse forms. Varied views exist about postcolonialism and how the happenings in previous colonial states are viewed. McCowan (2015, p. 41) opines that the roots of postcolonial theory are embedded “in the post-structuralist movement associated with French philosophers, historians and linguists in the mid twentieth century.” These theorists reinvestigate and interpret reality instead of accepting established discourse.

Postcolonial theory uses these ideas to interrogate the relationships between previously colonized people and the colonizer. Initially, this theory was a subdiscipline of literary and cultural studies which has developed due to “interest in the historical legacy of European colonialism” (Tikly, 1999, p. 604). It was used to analyse and understand art and literary texts and explain the political and economic situation of states that were previously governed by colonial powers, but it has been harnessed to explore issues relevant to education. Most writers focus on economic concerns, and only look at education and non-economic concerns as they relate to economics. Thus, they explore access and quality of basic education “in the context of deepening austerity and structural adjustment programmes” (ibid., p. 605). This is true of many small states that have relationships with international lending agencies like the World Bank and the IMF, as explored in Chapters Two and Four about the Jamaican situation.

Tikly notes that although postcolonialism is an approach that is useful for critical discussion of educational issues, little effort has been expended to develop the theoretical dimensions of the “colonial legacy in education” (1999, p. 604), although some education writers have started to incorporate post-colonial perspectives in their works. Despite this view, Unterhalter (2015, p. 21) maintains that the work of post-development scholars such as Arturo Escobar and Gayatri

Spivak has helped to engender interest in “postcolonial theorizing in education and international development.” In fact, McCowan & Unterhalter (2015), Cowen & Kazamias (2009) among others have utilized the theory to interrogate the impact of colonialism on the current state of education in postcolonial states.

Undoubtedly, in diverse ways, critics and writers have harnessed postcolonial theory and have used it to understand and highlight their realities. In fact, as Unterhalter (2015) explains, because the theory is still emerging, and no paradigms are firmly established, writers utilize various features, including personal experiences as postcolonial subjects, to interrogate their realities. McCowan (2015, p. 42) cites Unterhalter (2007), and notes that his main critique of postcolonialism “is its lack of a clear path of action in response to the situation of domination.” Spivak (1999) also points to limitations of postcolonial studies, insisting that the focus on what was lost in the past can negate the current realities that are still impacted by colonialism in its varied forms including globalization and neocolonialism.

Postcolonial theory draws on other western theories (Dirlik, 1994; Loomba, 2007; Ashcroft, Griffiths & Tiffin, 2013). Much anti-colonial struggle was influenced by Marxist discourse (Smith, 2006). The late seventeenth to early eighteenth hundreds saw renewed efforts at domination by Europe and America. Marxists saw this as the redevelopment of imperialism and highlighted the plight of the masses in this equation. Colonialism ended after “the economies of Third World societies had already been captured, in structure and orientation, by the capitalist world market. “Independence” was therefore termed “neocolonialism” by many radical theorists” (Peet and Hartwick 1999, p. 106). Globalization was/is therefore the result of the old imperial powers’ efforts to make the world a single social, economic and cultural system, under their rule (Rizvi, 2005; Lunga, 2008; Rizvi, Lingard & Lavia, 2006; Hill, 2004; Ashcroft, 2010).

Postcolonialism focuses on the political and cultural struggle against colonialism and imperialism; it interrogates how European culture, history, and knowledge combined to advance colonialism/imperialism. It also focuses on continuing international oppression and exploitation and their effects on the disadvantaged Third World or postcolonial subjects (Lunga, 2008; Dirlik, 1994; Loomba, 2007; Kapoor, 2008; Kohn, 2012; Ashcroft, Griffiths & Tiffin, 2013).

Postcolonial embraces neo-colonialism and is synonymous with anti-colonial and post-independence (Young, 2001; Ashcroft, Griffiths & Tiffin, 2013).

“More than three-quarters of the people living in the world today have had their lives shaped by the experience of colonialism” (Ashcroft, Griffiths & Tiffin 1989, p. 1; Brians, 2008). Thus, political and economic spheres and the general existence of colonists are impacted. West Indian society consists of varied racial groups that are still subject to the “hegemonic pressures of their former European owners” (ibid., p. 146; Brians, 2008). All aspects of contemporary life are impacted by the legacy of colonialism (*Encyclopaedia of Philosophy*; Strongman, 1996). Thus, in examining the secondary education system in Jamaica via postcolonial eyes, this research examines some of the “practices which arise in response and resistance to colonialism” (De Hay, 2007, p.1; see also Lunga, 2008; Strongman, 1996).

From the 1950s and 60s leading to the twenty-first century, post-colonialism was birthed as a way to examine decolonization in light of the hegemonic dominance of Europe and the United States (*Encyclopaedia of Philosophy*). All the movements of the Third World, including those in the Caribbean and Jamaica, towards nationalism and attempts to liberate themselves from European examinations were postcolonial. Anti-European, anti-imperialism and decolonization qualify as post-colonialism. Postcolonialism focuses on studying the postcolonial condition and examines relationships between the colonizer and the nations that emerged after colonialism. Descendants of the colonized who engage in post-colonial studies seek to claim autonomy and authenticity and try to right the perceived wrongs meted out by colonialism (Strongman, 1996; Hume 2000). In many cases, as happened in the Caribbean, modifications to the education system were promoted to effect these changes.

The meaning of postcolonial

Unterhalter (2009, p. 653) suggests three meanings of postcolonial: the first concerns those “states and societies that have emerged from colonial pasts and that are struggling with these legacies to mould new forms of education.” This definition is embraced by this writer in understanding the new education systems in small postcolonial states. The second meaning focuses less on historical realities and more

on the voices of peoples that had been rendered invisible and silent, the Other; the lives of previously colonized persons who had been marginalized and even erased and forgotten are given prominence. Spivak (1999), also echoes these views pointing to the need for colonial subjects to reposition themselves from the margin as silent other and tell their story. Through post colonial theory, “the multiple experiences of colonised people... always portrayed in deficit in relation to dominant forms of knowledge, homogenized by articular identities ... and silenced by the languages of power” are given centre stage, moved from the margins and promoted as just as important as the discourse of the center (Unterhalter, 2009, p. 792). Education is thus the means through which “the process of negotiating identities” is facilitated. “Authors who were critical of divisions associated with colonial political economy used the education they received to articulate a different vision of society. They present an alternate beginning point for the history of education and international development” Unterhalter (2015, p. 15; 2009).

Inherent in the adoption of a Caribbean examination system and the establishment of the Caribbean Examinations Council (CXC), was this view by the architects, as explored in Chapter Three, to provide education that was more relevant to local, indigenous lives, history, demands and experiences to give them a voice, so their stories can be told. As Unterhalter (2009) notes, this is not an easy exercise, because the postcolonial must mediate multiple, fluid identities while trying to give voice to the previously voiceless Other. McCowan (2015) also notes that the proponents of postcolonialism advocate emancipation, liberation from inherited knowledge and increased awareness through critiquing and deconstructing the inherited ways of looking at reality. This writer embraces these views in presenting the CXC as a postcolonial response to colonial education in Jamaica.

The third meaning of postcolonial, provided by Unterhalter, considering issues of “citizenship that enhances meanings of equality and justice” (2015, p. 215) is also explored by this thesis. The postcolonial thrust to balance the scales and ensure recognition is given to all the voices in the debate and the role played by education in ensuring that these aspects of humanity are promoted, are also central to the examination of the secondary education system in Jamaica and efforts to replace the colonial model with a more relevant, indigenous, Caribbean one. In fact,

in establishing the CXC, a part of the mandate was that the Council would be more inclusive of the general population and cater to a greater majority of the population than was accommodated by the London and Cambridge Examination Boards. This was to ensure inclusion of those groups in the society that were “systematically excluded from forms of quality education that confer privileges in the broader society” (McCowan & Unterhalter, 2015, p. 7).

Neocolonialism and globalisation, colonialism continues

Neocolonialism, a term coined by the first president of independent Ghana – Kwame Nkrumah, was made popular in his book, *Neocolonialism: The last Stage of Imperialism*. Young (2001, p. 44), providing a historical perspective on post-colonialism, refers to Nkrumah’s insight into the system: “Neocolonialism is the worst form of imperialism. For those who practise it, it means power without responsibility and for those who suffer from it, it means exploitation without redress,” (1965, p. xi). Thus is the fate of many small states.

Neocolonialism is the “new force of global control operating through a local elite” (Ashcroft, Griffiths & Tiffin 2000, p. 64) who had been trained to assume control after independence. These were representatives not of the locals but the imperialists; they were willing or unwittingly agents of imperialism. Despite mouthing nationalistic, anti-imperial sentiments, the comprador class was subjected to the punishing capitalistic and economic power of their former masters. They are beneficiaries of, complicit with and reproduce the inequalities of global capitalism and are poor apologists for globalization (Rizvi, 2005; Dirlik, 1994; Loomba, 2007; Rizvi, Lingard & Lavia, 2006). Mishra and Hodge (1984) aver that postcolonialism “foregrounds a politics of oppression and struggle and problematizes the key relationship between centre and periphery” (p. 276).

European imperialism ended because after World War II, colonies were rebelling with support from the Soviet Union, China and Cuba. It was too expensive to maintain the colonies due to resistance and pressures driven by economic expediency from the USA (Young, 2001). The new system, neo-colonialism, used interchangeably with globalization in some spheres (Rizvi, 2005; Rizvi, Lingard & Lavia, 2006) was a “more subtle, indirect version of the old” (Young, 2001, p.44).

Those who struggled for independence thought that it would guarantee self-determination. But they were in a similar state as Nkrumah who "...found that with independence, in many ways his power was only nominal: he had political power, but he did not gain control of the economy" (Young , 2001, p. 45). Major industries, import and export trade were in British hands. International financing, marketing and processing arrangements were already intertwined with the cocoa industry, coffee, diamond, gold, timber, and oil. The markets were centered in and controlled by London and New York. "Independence brought to light an apparently new form of subservience, to the economic system of capitalist power...." (ibid., p. 45). The states were theoretically independent but economic and political policies were directed from external sources. Nkrumah argued that the US stage of colonialism – neo-colonialism, is "an empire without colonies" (Young, 2001, p. 46). The newly independent leaders were subject to the major world powers, many of whom were former masters, who continued to act in a colonialist manner. No military force was required "because the hegemony of the ruling class was sufficiently established at a cultural, ideological, economic and political level..." (Ibid.). The ruling class finds itself in complicity with the needs of international capital as control is maintained via economics, access to capital and technology and policing by financial organizations such as the WTO and the IMF (Young, 2001).

Nkrumah (1965, p. x), cited in Young (1991, p. 47) laments that, "The result of neo-colonialism is that foreign capital is used for the exploitation ... of the less developed parts of the world. Investment under neo-colonialism increases rather than decreases the gap between the rich and the poor countries of the world." Resources of the Third World are exploited by the developed world through trade agreements, foreign aid, the World Bank and IMF in the form of capital for projects, cultural imperialism, Christian imperialism, The Peace Corps, NGOs funded by US foundations and the media which all help to establish and maintain control over small states and by extension their education systems (Young, 2001). It would seem then that despite nationalistic sentiments, small states have not escaped the imperialist trap and are restricted in their efforts to localize their governance and their education systems.

Hall (1996, p. 242), in “When was the post-colonial?” also raises questions about the meaning of colonialism and the historical and chronological boundaries within which it is viewed. He refers to the work of Shohat (1992) and McClintock (1992) who query the multiple meanings, the lack of “clear-cut distinctions between colonisers and colonised” because of collapsing of time collaborations, merging of cultures and the resultant hybridity of peoples. Hall criticizes these writers and insists that the effects of colonialism are not over, in fact, neither has colonialism ended. In highlighting the varied views, Hall also points to Dirlik (1994) another post-colonial scholar, who also views postcolonial as the period after colonialism, erroneously embracing the views of Shohat and McClintock that colonialism has passed.

Tikly (1999, p. 606) also avers that “colonialism is not “over” in the sense of an epochal shift, but that its modalities and effects are being transformed as a consequence of globalisation.” Spivak (1999) concurs noting that the economic systems of the world are transformed from one system to another; globalization, carries on the system that was promulgated through imperialism. This writer embraces these views and agree that globalization, also referred to as neocolonialism, is in fact another form into which colonialism has morphed (Ashcroft, Griffiths & Tiffin, 2000, p. 51). As explored in Chapters Two and Four, the demands of these systems must be met by postcolonial states like Jamaica, that receive gifts, grants and loans to improve national, economic and social conditions including education.

Globalization entails economic and cultural domination perpetuated by colonizers through direct and indirect economic and cultural control, privileging the imported over the local. Multinational and transnational companies and global monetary institutions continue the control of neo-colonialism, offering aid with strings attached. They invest in countries which allow them access to raw materials, cheap labour, and light or non-existent taxes which ensure that they maximize their profits (Parenti, 1992 – 2005; Dirlik, 1994; Ashcroft, 2010; Loomba, 2007; Hill, 2004). Because of these corporations, which determine global economic activities, Third World countries cannot develop their independent economic and political identity

(Dirlik, 1994; Loomba, 2007; Ashcroft, Griffiths & Tiffin, 2013). Money that should be invested in social services, education included, is diverted elsewhere.

Countries like Ghana had technically gained independence; yet external powers “continued to play a decisive role through international monetary bodies, through the fixing of prices on world markets ... and a variety of educational and cultural institutions” (Ashcroft, Griffiths & Tiffin, 2000, p. 162 – 3). The nations gained the trappings of sovereignty, but the financial capitals retained control of the profitable resources. This indirect dominance was less costly to execute and more politically expedient than colonialism (Parenti, 1992 – 2005). Indeed, as Nkrumah argued, neo-colonialism was more insidious and difficult to detect and resist than colonialism; it is like fighting an unknown, invisible enemy.

According to Ngugi (1993, 1981), as cited by Young (2001), cultural dominance is ensured through colonial language and Western educational, legal, and political institutions set up by imperialists. The colonized, Western-educated elite identify less with their people than the colonizer. They enjoy opulence and “facilitate the exploitative operations of western national and multinational companies” (Young, 2001, p. 48). Thus, postcolonial writers, criticising the establishment, writing in the language of the colonizer, seem to be complicit with Empire. These intellectuals - “hybrids” - who had been educated by or had lived in the mother countries occupy “in between positions” (Ashcroft, Griffiths & Tiffin, 2000, p. 132). Indeed, the definition of postcolonialism's aim by Prakash, a Princeton historian (1994, p. 1475), as reported by Ashcroft, Griffiths and Tiffin (ibid.) show that the roots of the theory have sprung from “colonialism and Western domination.”

Ironically, intellectuals seem to be harnessing the product of the First World to interrogate issues that impact the post-colonial native who is subject to similar dominance, cultural dispossession, voicelessness and economic exploitation by neo-colonial transnational economic agencies (Ahmad, 1995; Rizvi, Lingard & Lavia, 2006; Hill, 2004). As colonial hegemony is reinforced in education, some view the western educated elite as traitors. Yet the colonizer and colonized coexist in language and culture moving through various stages “abrogation/refusal and appropriation to

accommodation and compromise” (Mishra & Hodge, 1984, p. 276). It is a complex relationship not easily defined by binaries and clear-cut boundaries.

It is interesting to note that terminologies of post-colonialism - margin, center - are now being used to refer to globalization, which is a new form of sovereignty (neo-colonialism) though different from the European empires. Now, Empire has no “center of power”, no “fixed boundaries or barriers”; it “incorporates the entire global realm” (Loomba, 2005, p. 214). Empire aims to absorb all nations into an international network (Rizvi, Lingard & Lavia, 2006; Dirlik, 1994). Empire theory, as postulated by Hardt and Negri (2000, p. 182), does not identify the US as the Empire but they note that “Empire is born through the global expansion of the internal US constitutional project” (p. 214). Thus, globalization is considered as a form of neo-colonialism which operates on behalf of the economic and financially powerful elite (Rizvi, 2005). Invariably, as explored in Chapter Two, globalization impacts education systems and may even be a greater determinant of education systems than colonialism.

Almost 100 former colonized nations are now independent, but many, like Jamaica, are influenced by the new global powers (Weatherby, 1987). Despite independence, many Third World nations are characterized by socio-economic and political problems and still rely on the global powers for economic and social development. The US, Germany, Japan, Britain, and France are the developed world’s political leaders, and they play key economic roles in the affairs of Third World countries. Thus, whereas colonialism in the old form is non-existent, neocolonialism is evident and active (ibid.; Hill, 2004; Kapoor, 2008).

The complexities and ambiguities of postcolonialism

Anticolonialism is the struggle against colonialism by colonized peoples who offer resistance to and reject imperial political, economic and cultural operations, striving to replace them with local control. In the second half of the twentieth century, anti-colonialism emerged fuelled by radical Marxism. The emphasis was on the need to empower locals. Decolonization, similarly, is focused on ridding independent states of the entrenched colonialist power (Ashcroft, Griffiths & Tiffin, 2000; Hume 2000, citing Nettleford).

Postcolonial critique seeks to undo the European description or ascription of the colonized using critical means (Loomba, 2005). Ironically, western critical theories are utilized by postcolonialists to critique western systems within which they reside (Lunga, 2008; Kapoor, 2008). Postcolonial criticism exists within colonial structures; Fanon, for example, utilized Lacan's theory of ego to explain how the colonized was viewed by the colonizer. Colonialism, Fanon maintained, established the relationship that existed between Blacks and Whites. The conqueror – native dichotomy is a representation of global issues. Spivak and Bhaba criticize the binary division – colonizer and colonized – and explore the multiple facets of colonialism. Edward Said and Benedict Anderson also embrace the view of hybridity as against dichotomy.

There is no neat dichotomy between colonizer and colonized “both are caught up in a complex reciprocity” (Loomba, 2005, p. 194). See also Lunga, 2008; Kapoor, 2008; Hume, 2000; and Rizvi, Lingard and Lavia, 2006 who explore hybridity. Rizvi (2005), citing During (2000), avers that embracing hybridity and ambivalence renders the theory and theorists as complicit with, even reconciliatory instead of critical of colonialism and its legacy. Parry (1996) “takes anti-colonial nationalism as emblematic of the native ability to question and counter colonial discourse” (p. 196). Critics of postcolonial studies point to the fact that ironically, the proponents of the theories are themselves agents of colonialism, having been schooled by colonial education systems. Hall (1996, p. 69) cites Fanon (1986), to show how enigmatic the postcolonial issue is: “For colonisation is never only about the external processes and pressures of exploitation. It is always also about the ways in which colonised subjects internally collude with the objectification of the self produced by the coloniser.” Thus is the complex nature of the issues with which postcolonial states grapple. Understanding the education system is no less complex. A postcolonial reading of education systems of postcolonial states will invariably examine how the colonial system impacted knowledge, self-determination and hegemony and unearth aspects of the indigenous culture that survived.

Postcolonialism rejects “established agendas and accustomed ways of seeing” (Darby, 1997, p. 12). Fanon, Foucault and Said are foundation layers in the discipline who sought to examine the life and culture of colonized people.

Postcolonialism has examined imperial control and how it has subverted or undermined the culture of colonized peoples. It is concerned with the views of the other, the exploited, presenting their experiences and seeing through their eyes to rewrite power narratives (Lunga, 2008; Hume, 2000; Kilburn, 1996, 2012). Education is a critical tool in this struggle to empower postcolonial subjects; thus there are nationaistic efforts to localize education systems freeing them from the ideology of the colonizer.

Despite the call for a postcolonial approach to education and a reimagining of curricula, in some small states, leaders are hesitant to replace the inherited education system with indigenous ones because they benefitted from colonial education. On the contrary, it is also true that many newly independent leaders and leaders of anticolonial struggles including Gandhi of India, Manley of Jamaica and Nyerere of Tanzania have used education as a key tool in the decolonization process. They “...used the education they received to articulate a different vision of society” Unterhalter, (2015, p. 15). They have struggled to introduce their own, new education systems to affirm their national pride and independence and indicate their aspiration to divest themselves of their former masters. Regrettably, economic expediencies have led to serious difficulties which see these nations reverting to their former masters or neocolonial multilateral agencies to fund, provide materials, and determine policies for their education systems (Chisholm & Leyendecker, 2008).

Another complex issue concerning postcolonial states is their divergent stages. Hall (1996, p. 245) insists that the term post-colonial cannot be applied homogenously to all states that were previously colonised. Citing Mani and Frankenberg (1993), Hall notes that “...in any case the ‘post-colonial’ does not operate on its own but ‘is in effect a construct internally differentiated by its intersections with other unfolding relations’.” This aptly describes the realities of many small states, including Jamaica, which are still engaged in relationships with metropolitan countries and international organizations that dictate their political, economic and educational realities. In essence then, despite the political independence from colonial rule secured by many small states, there is no true independence nor are these states post colonial, in the strictest sense of the word, as neocolonial relationships still persist. As Hall suggests and this writer agrees, “the

‘colonial’ is not dead, since it lives on in its ‘after-effects’” (1996, p. 248)

orchestrated by local political and economic leaders.

Another issue with which postcolonial studies grapple is the need to reposition the previously colonized peoples from the margins of society to the center and present them as important and central to history and society. Hall (1996, p. 247), citing Mani and Frankenberg, (1993, p. 301), like Unterhalter (2009), embraces the view that postcolonial theory engages in a “rewriting of earlier, nation-centered imperial grand narratives... [which] dis-place the centre-periphery, and the global/local reciprocally re-organise and re-shape one another... ‘post-colonial’ certainly is about, different ways of, ‘staging the encounters’ between the colonizing societies and their ‘others’. Hall also suggests that when we think of post-colonial, we are in fact examining the power and knowledge bases, the way dominated people were represented and characterized to “not simply oppose them but to critique, to deconstruct and try to ‘go beyond’ them” (1996, p. 254). Tikly (2001) concurs echoing the need to “re-narrativize” the globalization theory so that marginalized nations are placed at the center. He describes postcolonialism as a critique of the “metanarratives” of the European Enlightenment. McCowan (2015, p. 41) concurs noting that colonialism was not only about physical violence and resource extraction, but also about colonized peoples losing themselves and the fact that “they had begun to see themselves through the eyes of the colonizer and speak with the colonizer’s voice. The imposed language and frames of thought had cast them in the role of ‘other’ deficient and degenerate in relation to the norm”.

The postcolonial scholar thus tries to critique the “hidden assumptions and veiled disparagement of indigenous cultures” and focus on unearthing indigenous knowledge and world view through other eyes, interrogating and acknowledging multiple perspectives, rejecting the imposed version which marginalized the colonized (McCowan, 2015, p. 42). The local story that was erased at the expense of the global voice is being retold by postcolonialism; it is not a sub-plot of a “grander” narrative but that of a “violent event central to the developing new relationships of globalization and global capitalism.” Indeed, the legacy of colonization undergirds, and is central to the discourse on globalization and the internationalization of education (Tikly, 1999, p. 606, 617).

Post colonial theory, therefore, provides a less Eurocentric way of accounting for the effects of colonialism and globalization on former colonial states. It is concerned with alternatives to colonialism. In the education sphere, it involves “a rejection of imposed educational patterns and the establishment of alternative forms of provision” (Tikly, 1999, p. 613). In many former colonial societies, governments are still grappling with “the highly contested and complex process of developing curriculum that are more suited to the cultures and histories of the local population” (Ibid.). The colonial legacy in education is deeply rooted and not easily replaced. Unterhalter (2015, p. 14) affirms that “education had been a strand in the expansion of colonial or imperial rule for many centuries.” Through education, colonial ideologies were firmly entrenched and so it is right and fitting that through the same means, postcolonial curricula should be used to help with the rewriting of the narrative. Sahrma-Brymer (2009) citing Longwe (2001) speaks to the need, in the postcolonial era, to unlearn the erroneous messages inculcated via the colonial education system. Hall (1990) also insists that it is fundamental that we understand the power dynamics that occasioned the experience of colonialism which systematically subjected and dominated the experiences of black people, presented them as inferior and ‘Other’ and skilfully ensured that the black people bought and embraced the images that were created for them. It means then, that the education system must actively engage students in recreation of themselves, promote knowledge acquisition, and awareness of the worth and value of a people whose story was erased by the dominant narrative of the colonizing powers.

In fact, Tikly avers that “...postcolonial governments have often used education as a principal means to forge national unity and a common citizenship and have in fact strengthened rather than loosened their grip on education systems” (2001, p. 153). Additionally, it is increasingly difficult to define culturally relevant curriculum in light of the many contesting shareholders and stakeholders, the lack of financial and structural resources and the dominance of western culture and knowledge. Despite this, demonstrating an understanding of the role of education in establishing the post colonial divorced from the colonial legacy, Caribbean leaders established their own examination board, CXC, and relinquished the inherited systems tied to the London and Cambridge boards. Hall (1996, p. 69) in speaking to

the appropriation of education for postcolonial purposes, refers to Stuart Hall's observations that "...black people in Jamaica decolonized their minds with the tools of the colonisers turned to new uses." They created "...new fictions and new histories were constructed, telling stories of new identities for men and women, enabling Caribbean peoples to recognize themselves as Africans and diasporised."

This is not an easy task as Hall and other postcolonial writers espouse, through the concept of hybridity or syncretism, which maintains that it is impossible to present the original story of once dominated states in its truest precolonial form, as the encounter with colonialism created hybrid societies due to the mixing of cultures. This is true of the education systems of small postcolonial states which, despite efforts to divest themselves of their inherited colonial education system, still embrace vestiges of the colonial past in diverse iterations of the education product. Tikly (1999) also embraces this concept and insists that postcolonialism engages with more than binaries and explore the complex views of colonial culture, politics and identities. In fact, he holds that postcolonialism seeks to deepen the understanding of the colonizer/colonised relationship. Thus both "transverse" and "vertical" relationships between colonizer and colonised are explored. Hall (1996, p. 70) also recommends that it might be useful to rethink the Empire from a postcolonial standpoint by embracing the ambivalence and focusing on the "inter-connections between the histories of 'metropolis' and 'peripheries' and [refusing] the simple binary of colonizer and colonised."

In speaking to the myriad issues with which postcolonialism grapples, Hall (1996) also critiques the views of Prakash (1992) on postcolonialism and dismisses the notion that this theory only focuses on identity and ways to view the world. Using the writer's own text, (p. 353): "post-coloniality represents a response to a genuine need, the need to overcome a crisis of understanding produced by the inability of old categories to account for the world..." Hall (1996, p. 257) proves that "the 'post-colonial' [is] a distinctive theoretical paradigm..." which is useful to examine the world and the relationships that exist among nations, despite the criticisms that arise to negate the importance of this theory to previously colonized societies.

In defining postcolonialism, Tikly (1999, p. 605) refers to Hulme (1995), who avers that it is the “general process of disengagement with the whole colonial syndrome which takes many forms” and Loomba, (1998, p. 12) who defines it as “the contestation of colonial domination and of the legacies of colonialism.” Post colonialism focuses on the effects of colonialism in specific contexts. In viewing colonialism as a process, Tickly makes claims that are echoed by Hall (1996) and Unterhalter (2009a) that colonialism is not over; its effects and modalities are demonstrated via globalization.

Sharma-Brymer (2009, p. 656) citing Hickling-Hudson, Matthews & Woods (2004, p. 2) also concurs, defining postcolonialism as the process that “addresses the effects of colonization” and explores the power dynamics and inequalities inherent in postcolonial states. Citing Bhabha, (1994) and Said, (1978) she also concurs that the conflicts and effects of colonialism: “[e]xclusion, domination, and resistance” are continuing even in the present and “have shaped the relationship of power and knowledge and influenced understanding and representations of the world” (2009, p. 656). Exploring education systems through postcolonial lenses thus entails an examination of the complex inherited tensions, contradictions, contexts and concepts, while consciously balancing the many marginalized voices that had previously been silenced and giving primacy to the other sides of the story and taking into consideration issues of race, class and gender. While the latter is not germane to the issues in the Jamaican context, race and class are definitely important in understanding the inherited colonial education system and efforts made, through CXC, to rectify the situation with a more relevant, inclusive curriculum.

It is important that we understand the role that education played in establishing empire under colonialism and the legacy that was left behind for independent nations to utilize and build on. The systems were deeply entrenched and thus were difficult to change. These systems provided a binary education that was deemed necessary to ensure that only a few privileged persons, who were the elite of society, were educated to support the plantation economy, while the bulk of the black population remained illiterate to provide the requisite slave labour to support imperial aims (Tikly, 2001). In the post independence period, nations would

be tasked with reengineering their education systems to cater to the majority of the population to inculcate requisite skills and abilities to ensure that national aims are met, and development goals are realized.

Hall (1990, p. 222), speaking to the work of Caribbean cultural creators of identity insists that the concept is not problem free, despite efforts at giving voice to their own experiences. Identity, he maintains, is “a ‘production’ which is never complete, always in process, and always constituted within, not outside representation.” For Hall, Caribbean cultural identity consists of “common historical experiences and shared cultural codes which provides us, as ‘one people’ with stable, unchanging and continuous frames of reference and meaning” (ibid., p. 223). This shared identity has played a fundamental role in the postcolonial struggles and efforts to reshape the world through the eyes of hitherto marginalized people. Citing Fanon, Hall (1990, p. 224) avers that in order to rediscover their identity, Caribbean people must engage in “passionate research” to unearth the experiences distorted, disfigured, destroyed, buried and concealed by colonialism and then produce and retell their stories.

In undertaking to examine the education system of Jamaica as a representative post-colonial nation, the aim is to interpret, deconstruct and understand the extent to which the efforts of the government were, in fact, a postcolonial response to the education needs of the citizens. The aim is to fathom whether efforts were led by prevailing trends or by deep-seated desires to change the colonial heritage; whether the political directorate was rejecting the grand narratives of the centre and giving voice to the experiences, creativity, and initiative of the periphery. As a theory, post-colonialism advances the view of resistance to imperialism. Attempts are made to rediscover the native voice and indigenous culture mindful of the fact that the colonized had embraced the colonizers’ ideology resulting in hybridity (Lunga, 2008; Kapoor, 2008; Hume, 2000). Thus, no pure pre-imperial state can be created. Said’s writings display the need to move beyond “binaries and boundaries to a recognition of meeting-places and points of congruence” (Darby, 1997, p. 14). It will be interesting to see how Jamaica’s education system has coalesced with the inheritance of colonialism.

Summary/ Conclusion

Colonialism and postcolonialism provide some basis to comprehend the education systems of small states. Undoubtedly, the operations – including education systems are influenced by their colonial heritage. Many are still tied to the education systems of the imperial nations via external examinations. Others, embracing post-colonialism are cognizant of the seminal role of education, and desirous of using their education systems to shape their citizens, resist imposed models and struggle to establish their own in order to shape their identities. However, local education systems are impacted by global happenings. Global league tables and international assessments such as PISA are now considered as the standards by which education policies, systems and students' performance are measured. There is a complex, complicated, ambiguous power relationship between global and local. Globalization is viewed as neocolonialism which fosters oppression and subjugation on a greater scale than colonialism. It is complicated and multi-dimensional and grounded in networks of economic and political power which small states cannot challenge on their own.

Because education systems play a major role in preparing citizens to function both locally and globally, nations and international agencies invest heavily in education to facilitate their satisfactory preparation and ensure the successful execution of national and global plans. According to Human Capital theorists, education is an investment not only in individuals but also in national development (Ng & Feldman, 2010). This underpins the World Bank's and UNESCO's view of and rationale for lending to educational pursuits. The divergent views on the extent to which investment in education impacts the economy do not seem to deter governments and international agencies from embracing this theory.

Marxists' views about the power of education are applicable to small states. Although intellectuals have been schooled by, are allied to and function on behalf of the ruling class, to ensure meaningful change in society, their responsibility is to appropriate the social functions that acted on behalf of the ruling class, re-educate the masses and reshape their consciousness, replacing common sense with a counter hegemony (Burk, 2005; Levy, 1999; Sassoon, 2000). Post-colonial thinkers

aim to re-educate the masses to value and embrace themselves and escape the image imposed by their colonial forebears.

Through globalisation, small states continue to lose their resources to the core in unfair commercial practices (Halsall, 1997, p.2). Globalization and its industrialization and use of cheap, Third World labour replicate imperialism. Nevertheless, despite their peripheral and precarious positions, some oppressed states continue to be assertive and reject exploitation. Caribbean leaders' insistence on establishing CXC may be interpreted in this light. One wonders though if efforts at self-determination are pointless, as in many instances, developing nations embrace the demands of their benefactors, sometimes to their own detriment. Are the efforts of Caribbean governments, through CXC futile?

Postcolonial theorists interrogate the colonial legacy despite being products of that system. They develop and spread postcolonial ideas to challenge master narratives (Young, 2001; Unterhalter, 2015; McCowan, 2015). Indeed, they use education as a major tool to cross-examine received ways of thinking and invent autonomous narratives which are true depictions of post-colonial citizens. Postcolonial projects seek to exorcise the ghosts of colonialism while examining the complexity of the colonizer/colonized dichotomy.

Neocolonialism is a useful lens through which to examine the problems, pressures and policies that impact small states. Whereas many small states are officially independent and there are no overt claims of colonial ties, indirect control is exerted through the internationalization of educational performance via comparative league tables, multinational corporations, banking, business, international bank loans, cultural and military leaders. Relationships are contingent on the demands of the dominant power; developing countries' needs are secondary. Dirlik (1994, p. 356) cited by Loomba (2005, p. 206) suggests that "Postcoloniality is the condition of the intelligentsia of global capitalism." Postcolonial or anti-colonial readings of capitalism help to show the story in a different light – not of "peaceful evolution" but a "violent narrative" (Ibid., p. 207).

Neocolonial relationships are displayed in cultural, political, economic and military dominance. Cultural domination is one of the means through which Neocolonialism is sustained (Ahmad, 1995; Dirlik, 1994). The mass media and the

internet are powerful tools that convey the message of first world superiority. Adopting educational practices also perpetuates cultural dominance. Questions are raised about the myriad cultural, social and colonial backgrounds of students who are all evaluated via similar international tests and the inherent inequities and limitations in the measurements which ensure that small developing states are among the worst performers (Holford, 2014; Rogers, 2014; Bieber & Martens, 2011). Post-Cold War emphasis is not political but economic - securing markets, resources and cheap labour like the imperial powers during colonialism (Rizvi, 2005). Multinational corporations and private entities contribute to this struggle. Free trade has impacted negatively on Third World countries as they lack the bargaining power of large states which continue to maintain economic dominance.

The major problems that perplex small states, political, social, economic or cultural can be understood through postcolonial theoretical lenses. Table 5.1 below presents some of the major problems with which small states contend. Postcolonial theory, because of the multiplicity of facets which it covers and the fact that it draws on Marxism, interrogates Colonialism, Imperialism, World Systems and Dependence Theory isadequate to examine all the problems, pressures, and policies that impact small states. I agree with Kapoor, (2008) and Mangan, (2012), that a postcolonial approach to education is mandatory in the post/neo-colonial battle. Having been deployed as a tool for hegemonic dominance, through subtle power control, education must now be harnessed to right the wrongs. The postcolonial must devise strategies, through education, to escape cultural dependence, the imperial knowledge systems and recreate ways of knowing (Lunga, 2008; Unterhalter, 2015).

It is difficult to sever colonial ties as the influence over education was deeply entrenched and insidious (Smith, 2006; Mangan, 2012). In keeping with Gramsci's notion of hegemony, Smith (2006) and Entwistle (2009, 2012) maintain that through education, the imperial power solidified its position gaining control over the intellect of the colonized subjects. The postcolonial must regain this control.

Table 5.1 Factors that impact small states and their link to the theoretical framework

Factors	Theories
Inherited education system, western education, internationalization of education: international tests, league tables, accountability and learning outcomes, educational governance	Colonialism, post/neo colonialism,
Black/White racial dichotomy	Colonialism, Post colonialism
Rich/poor dialectic; economic and social inequities	Post colonialism
Hegemonic control, cultural dominance; subordination, dispossession	Colonialism, Imperialism, Post colonialism,
Loss of economic resources; loans and financial arrangements	Imperialism, Neo-colonialism
Exploitation via business, trade and transnational corporations	Imperialism, Neo-colonialism
Political independence but economic dependence, loss of democracy	Post/Neo-colonialism
Developing skills and abilities to function in the global market	Neo-colonialism

Jamaica through CXC is endeavouring to do this. This is a challenging task as there is tension between establishing relevant, indigenous education systems and depending on former colonial masters, whose education and certification have international currency and influence due to positioning on league tables and meeting governance, efficiency, quality, equity and policy criteria as recommended by organizations such as OECD and consequently are considered as superior.

It is not an impossible dream. Nationalists from small states have demonstrated that it was possible to utilize education and knowledge about European nationalistic struggles and compared the conditions to their own nations. Their nationalistic zeal for independence fuelled the struggle to achieve their own nationhood. Many nationalists saw Marxist-Leninist ideology as the approach to take to establish their nations and escape colonial powers (Weatherby, 1987).

The very structures of colonial government were used to secure independence. Early nationalists had been educated by and prepared to take the

place of the colonizer. Colonialists' values – political, cultural, and economic – persisted after independence thus many new nations did not have the educated nor experienced citizens needed to assume leadership positions. It is not surprising then, that post-colonial nations, like Jamaica, struggle to assert their independence over their curricula and examinations as they seek to realign the intellect of their subjects with their indigenous efforts to establish nationhood. Liberation movements that were anti-colonial sought to 'decolonize the minds' of colonized individuals (Torres, 2006, p. 541). Now, in contemporary society, education must be the tool to release the colonized from the complex burdens bequeathed by colonialism and reimposed by neo-colonialism (Rizvi, Lingard & Lavia, 2006; Kapoor, 2008). This is a major challenge as small states are impacted by the internationalization of education and struggle to improve their education systems in light of recommendations made by recognized international assessment bodies such as OECD (Holford, 2013; Sellar & Lingard, 2014).

Third World knowledge about itself is received from the First World. Knowledge is a part of the neocolonial relationship. Research funds, scholarships, scholarly journals, and material published by the First World are all embraced, sometimes uncritically, by the Third World. In response to intellectual dependence, some Third World postcolonial scholars and this writer call for the "indigenization" of academic discourse; using local knowledge to inform theories, concepts, methodologies and way of life (Peet & Hartwick, 1999; Sharma-Brymer, 2009; Hall, 1990; Hall, 1996; Unterhalter, 2009).

Despite having gained political independence, many developing small states find that they are still reliant on industrialized nations because of the sinister neo-colonial trade and aid relationships. It seems impossible to escape the influence of outside agents (Altbach, 2006, citing Mende, 1973). Leaders therefore constantly engage in balancing acts negotiating between sovereignty and dependence. The education system is embroiled in the battle and has not escaped the problems, policies and pressures that impact the efforts of small states to assert their nationhood in a global environment. The system must be used intentionally to assist with the problems and pressures and devise solutions for survival in the global marketplace. How successful has Jamaica been in using the CXC to escape colonial

education? Examination of the data collected will help to evaluate this. The ensuing chapter details the methodology employed in this case study.

CHAPTER SIX

METHODOLOGY

In examining the pressures, policies, problems and progress involved in Jamaica's relationship with the CXC, various data collection means were employed. This was necessary to get varied perspectives of stakeholders on the issues involved. As a small state, Jamaica, like others, has to contend with varying factors and forces to provide a suitable secondary education for her citizens. The need to remain current, competitive and prepare students to function globally has to be offset by the need to meet national developmental goals and provide an education that is relevant to the needs of the students. The prevailing pre CXC sentiment was that the education system with terminal examinations from Britain was irrelevant and foreign to the students. Independence and nationalistic sentiments spurred by post colonialist views encouraged the push towards embracing the regional examination system which was touted to be a post-colonial response to the examinations that were offered by the Cambridge and London Examination Boards.

The purpose of this chapter is to describe the methodology used in this research. Due to the multi-faceted nature of the research problem and the varied tensions that led to and continue to influence the operations of CXC, it was prudent to employ a mixed research design to facilitate the investigation of the issues from different angles and incorporate varying voices of stakeholders. The aims, details of the research design, research questions, instrumentation, sampling and data collection procedures are presented.

AIMS

The research was driven by the following aims:

1. To review the reasons for the replacement of colonial examinations by CXC examinations and the impact of these on their implementation.
2. To assess the extent to which the Caribbean Examinations Council (CXC) examinations have successfully replaced colonial education and examinations.

3. To explore the reasons for the current state of implementation of CXC examinations in Jamaica.

Research Questions

1. How far does the CXC reflect the tensions and pressures of modernisation through a neo-colonial legacy in a period of globalisation?
2. What are stakeholders' views regarding the extent to which CXC examinations have successfully replaced colonial examinations in Jamaica in terms of the requirements of national identity and preparation for globalisation?
 - 2a. How does the performance of the Caribbean Examinations Council compare with its objectives and mandate?
 - 2b. How far has a wider cross section of students been able to achieve qualifications through the CXC examining process?
 - 2c. To what degree have more students achieved success in CXC examinations compared with the Cambridge examinations?
 - 2d. How far do students who pursue CXC courses acquire the requisite skills for citizenship and nation building?
 - 2e. To what extent do CXC syllabi facilitate dynamic, contemporary teaching strategies and activities that help students to engage positively with the socio-economic issues that abound in the Jamaican society?
 - 2f. How far have students who sat the CXC examinations been adequately prepared to function effectively in the global working environment?
3. How might the CXC develop in light of these tensions and findings?
4. What tensions and contradictions have been played out in the implementation of CXC in the Jamaican context?

RESEARCH DESIGN

Qualitative and Quantitative Approaches

This case study utilizes both qualitative and quantitative approaches. The case is CXC. The case context is the Jamaica education system. Jamaica was chosen, as it was the first to gain independence and is the largest English-speaking Caribbean island thus, "it often serves as a model and a leader in economic, political and educational affairs" (Jervier 1976, p. 8). Robson (1993) advises that, "Case study is a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon... using multiple sources of evidence" (p. 52; 2011). Thus, this method was apt for the topic under consideration. The qualitative and quantitative approaches were considered because each complements the other; according to Leedy and Ormrod (2001), "we learn more about the world when we have both quantitative and qualitative methodologies at our disposal than when we are limited to only one approach or the other" (p. 101). Additionally, Brown and Dowling (1998) advise that "... the best option will always be for a dialogical use of a combination of qualitative and quantitative methods" (p. 83).

Each approach is ideal for different situations. Leedy and Ormrod (2001) note that qualitative research is "used to answer questions about the complex nature of phenomena, often with the purpose of describing and understanding the phenomena from the participants' point of view" (p. 101). Qualitative researchers are concerned about not only "how things got to be the way they are, but also with gaining insights into how things got to be the way they are, how people feel about the way things are, what they believe, [and] what meanings they attach to various activities..." (Gay, 1996, p. 13). Thus, the appropriateness of this approach for this case study.

Qualitative researchers use a variety of methods and data gathering strategies in order to "achieve the objective of holistic, in-depth understanding" (ibid.). These are usually supplemented by "collecting of relevant documents and extensive, informal interviewing" (ibid., p. 14). Hence, in this regard, the methods that I have identified and utilized are in keeping with the qualitative tradition.

Quantitative research, unlike qualitative research, is generally used to answer questions about relationships among variables and is useful for predicting, explaining and controlling phenomena. It is concerned with numerical data which requires statistical procedures to analyze and draw conclusions. Studies which "investigate

relationships ... describe numerically ...[and] investigate the relationship between two or more quantifiable variables..." utilize quantitative approaches (Gay, 1996, p. 14). Some of the data which this researcher used was interrogated in this manner to enhance and elucidate the qualitative findings.

Case Study

Case studies can use a mix of qualitative and quantitative evidence and they do not have to be built on detailed observations as a source of data. Yin (2003) provides a useful definition for a case study which informed this researcher's decision:

A case study is an empirical inquiry that investigates a contemporary phenomenon ... The case study enquirer relies on multiple sources of evidence, with data needing to converge in a triangulation fashion.... (p. 14)

This research adheres to the Embedded, Single-Case design. This is appropriate when the case is representative or typical. In this regard, "... the objective is to capture the circumstances and conditions of an everyday or commonplace situation ... The lessons learned from these cases are assumed to be informative about the experiences of the average person or institution" (Yin, 2003, p. 41). It is believed that Jamaica is typical of other small states that have tried to establish their own examination system, so the main context is Jamaica's secondary education system, with the chief focus on the terminal examinations that students do.

Notwithstanding this, the researcher is aware that case study research is often criticized on the grounds that the findings are not generalizable. Yet Gomm, Hammersley and Foster (2000), draw on the arguments of Stake and affirm that "case studies facilitate learning on the part of those who use them; and that this involves 'naturalistic generalization'. Thus, as postulated by Lincoln and Guba (2002), and Gomm, Hammersley and Foster (2002, p. 98), the findings from case studies can be used to make comparisons with other cases that are similar: "their 'transferability' can only be assessed by comparing the 'fit' - the similarities - between source and target cases. Other researchers maintain that we can look on a case as a microcosm of society so what is found in one case can be symptomatic of

what obtains in society in general. Thus, like the figure of speech synecdoche, which literary theorists use, qualitative researchers use “a part of something to stand for the whole” (Gomm, Hammersley & Foster 2000, p. 98).

Scholz and Tiefje (2002, p. 10) posit that these types of case studies involve various units or objects. “The multiplicity of evidence is investigated at least partly in sub-units which focus on different salient aspects of the case”. Yin (2003) suggests that, “The sub-units can often add significant opportunities for extensive analysis, enhancing the insights into the single case” (p. 46). The embedded case study design is usually not limited to qualitative analysis but incorporates “both qualitative and quantitative data and strategies of synthesis or knowledge integration” (Scholz & Tiefje, 2002, p. 14). This concept of synthesis was embraced in this research, thus the type of case study is ideal for the intended purposes.

DATA COLLECTION

Various methods were employed to triangulate data to answer the research questions. Table 5.1 summarizes the data collection strategies – interviews, secondary data analysis, and questionnaire survey. Details of these strategies are provided subsequently.

Interviewing

Semi-structured face-to-face and email interviews were done with CXC officials, Ministry of Education personnel, tertiary institution personnel, and industry officials from various fields or occupations. Interviews are ideal data collection tools as they offer the researcher access to past events or situations at which the researcher was not present (Scott & Usher, 1999; Peräkylä, 2005). They also afford the researcher the opportunity to cross check information among sources. Robson (1993, p. 229) makes a case for interviews: “The interview is a flexible and adaptable way of finding things out... asking people directly about what is going on is an obvious shortcut in seeking answers to our research questions.” Face – to – face interviews are ideal because they allow the researcher to modify the “...line of enquiry, following up interesting responses and investigating underlying motives”.

Table 6.1 Data Collection Procedures

Instruments	Sample Group or Sources	Number of Respondents	Research Question
Interview Schedule	Government Officials Educators at tertiary level Industry Officials	6 5 5	1, 2b, 2d, 2f, 2d, 2d, 3,4
	CXC Officials Markers Administrators Architects	6	1, 2a, 2b, 2c, 2d, 2e, 3,4
Questionnaire	Teachers	20	2a, 2b, 2c, 2d, 2e, 2f, 3
Documents	Reports from exam bodies Syllabuses Mathematics English Language English Literature	For select years	1, 2a 2a,3
	Reviews or Reports by independent researchers as presented in national newspapers and government policy documents	At least two per year for some years detailed below	2a, 2c, 2d, 3, 4
Census Data	GCE only 1970 – 1972 CSEC , GCE 1980 – 1982 CSEC, GCE 1990 – 1992 CSEC 2000 – 2002; 2009 - 2012 CAPE 1998 - 2015 GCE'A Levels – early years, before CAPE and since CAPE		2b, 2c 3

These are also beneficial as the researcher is able to interpret messages inherent in non-verbal cues which can assist in the comprehension of verbal responses (ibid.).

Despite being aware that the interviewer who uses email interviews does not have this opportunity to establish a face-to-face relationship with the respondents and benefit from the messages inherent in non-verbal cues, they were used because of the inability to meet all the targeted informants face to face due to lack of geographical proximity (Fontana & Frey, 2005). Despite the fact that electronic interviews are less costly, the researcher is at a disadvantage in not knowing if the targeted source is in fact the one who really responded to the questions. Additionally, the fact that the respondents have the questions to review and script their responses could mean that the answers are not spontaneous and are carefully

worded sometimes to the exclusion of pertinent, uncensored information that the researcher needs. The ability to probe and seek clarification is also lost in the email interview (Fontana & Frey, 2005; Brad, 2004). Nevertheless, the researcher ensured that the lines of communication were still open so that if answers were unclear, she could contact the respondents and seek clarification. Despite these limitations, individuals who are generally hard to locate or who are too busy to meet with the interviewer may be willing to complete and return an electronic questionnaire.

Although some subjects may refuse to use this medium because of the lack of anonymity and confidentiality, the nature of the data required may not inhibit some people from using the Web (Coomber, 1997; Kenway, 1996; Fontana & Frey, 2005; Brady, 2004). For this research, information required was not of a sensitive nature and the respondents were contacted via telephone, briefed about the nature of the research and the interview questions, and permission was sought to send the interview questions via email. This proved advantageous to the researcher, as in many cases, the individuals responded with alacrity and answers were returned long before some of the face to face interviews were conducted, despite numerous calls and scheduling for the latter. Another advantage of the email interview is that the responses are written, so the researcher is spared the task of transcribing them.

Like face to face interviews, semi-structured or / and unstructured interviews may be more advantageous than structured ones. The former are flexible, allowing the researcher to probe and:

test the limits of a respondent's knowledge; they encourage assessment ...[they] can also result in unexpected or unanticipated answers which may suggest hitherto unthought of relationships or hypotheses." (Robson, 1993, p. 233)

Nevertheless, Scholz and Tiefje (2002) suggest that in an embedded case design, focused or structured interviews are often recommended. For this research, depth, structured interviews were done with key informants.

These kinds of interviews, with powerful people, pose various challenges. Because of their position in society and the fact that they are accustomed to give and conduct interviews, the possibility exists that they could "control the interview

process such that certain topics are discussed and others dismissed.” In interviews with policy makers deemed to be powerful, “researchers need to recognize and explore more fully the interview as an extension of the “play of power” rather than separate from it” (Walford, 1994, p. 8). Ball (1999) concurs and encourages the researcher to view these interviews as more than a commentary on power play. These views were uppermost in this researcher’s mind when conducting the interviews. Additionally, some government officials can be ‘economical with the truth’ due to their positions and political aspirations (Gewirtz & Ozga, 1999). Efforts were made to separate respondents’ feelings and personal views from facts and treat all interviews as versions of reality. The researcher triangulated information obtained from informants with documentary sources in an effort to verify information received and enhance the validity and reliability of the findings.

At the other extreme, the researcher is well aware, as Fitz and Halpin (1994) suggest, that some elite officials are skilled at revealing very little and so the researcher had to be alert and made efforts to ensure that conversations are steered in the desired direction and probes utilized to elicit required information. When requested, the interviewees were given the interview schedule before the interviews, ensuring that they were given the chance “to organize their thoughts” (Fitz & Halpin, 1994, p. 37). This could prove to be disadvantageous as they may create and speak to their own agenda, notwithstanding the researcher’s aims and objectives. This researcher was obligated to be polite and defer to the powerful yet gather the desired relevant information. Thus, when the interviewees veered from the areas of focus, they had to be diplomatically steered back to the areas of emphasis for which data were being collected.

The interviewer cannot manipulate an experienced interviewee who can exert control in subtle ways, over the content of the interview (Ball, 1999). The power play inherent in these interviews renders them difficult to interpret, yet they are important to get details on policy development processes which are not available in documentary form (Fitz & Halpin, 1994). The targeted interviewees in the government organizations and the CXC were vital to provide information on the processes involved in devising and executing policies related to the CXC - its introduction, implementation and effectiveness. McHugh (1994, p. 54) citing

Hanson (1972), affirms that these interviews “can shed light on elusive but important problems such as how decisions are reached, how influence is exerted ... and how organizations are run.” The views, from a number of perspectives, proved pertinent to assist this researcher “to construct a more complex and more finely grained narrative account and interpretation of” the realities under investigation (Fitz & Halpin, 1994, p. 37).

Despite the inherent advantages of interviews, the researcher acknowledges the difficulties that can be encountered in carrying out observations and rating while ensuring completion of ideas via probing. The interviewer misses non-verbal cues - gestures, facial expressions, tone, hesitations and reformulation when writing down answers. Another point to note is that the interviewer has control over the data and, consciously or unconsciously, selects what to write and this may reflect bias (Fontana & Frey, 2005). Peräkylä (2005, p. 870), citing Silverman (2001), avers that “no data are untouched by the researcher’s hands.” Oppenheim notes that, “Sometimes [the interviewer] only hears what she expects or wants to hear” (1992, p. 116). Additionally, the information collected may be difficult to analyze and code; yet open-ended questions give the respondents the opportunity to “let their thoughts roam freely, unencumbered by a prepared set of replies” (Oppenheim, 1992, p. 113). Respondents can present their thoughts and ideas spontaneously, in their own language. Despite this strength, this researcher is well aware of other limitations which include: gaining access, interviewer bias, the amount of time needed to conduct each interview, the circumstances under which the interview is being conducted, and the interviewees’ attitude to the topic.

In addition, the difficulty which the interviewer experiences in trying to remain objective and unaffected by her attitude to the topic is in fact a great challenge. This researcher, while very aware that “complete objectivity is a myth of positivism” (Semel, 1999, p. 209) endeavoured to separate her feelings, thoughts and knowledge of the situation from the information received from the respondents. However, at times, it was difficult to remain aloof and not share empathetically in the observations of the informants. However, to maintain objectivity, like Semel (1999, p. 209), in her efforts to remain objective while researching a school in which she had previously worked, this researcher engaged in “constant self-examination,

reflection, criticism and ongoing discussions with colleagues” to ensure detachment and that subjectivity was kept to the minimum. The influence of “the researcher as author” was not lost on this writer. In reporting the findings, it is easy for the researcher to craft the data to reflect what is desired to support a hypothesis or proposition, excluding those aspects that seem to be contradictory (Fontana & Frey 2005, p. 714). This researcher was aware that that could happen and so was careful to maintain an objective perspective and report with honesty, the findings, even when they seemed to be contrary to personal perceived perceptions.

Additionally, this researcher is aware that she may have been helped or hindered the data gathering process by virtue of her sex, age, background and educational level as all these influence respondents’ attitude towards researchers and their subject matter. Conversely, some of the respondents may have felt flattered by the status accorded them by the interviewer, while others may have feared the use to which the information gathered will be put and may have tried to control the interviews (Oppenheim, 1992).

Notwithstanding all these negatives, this researcher embraces the view of McHugh (1994) who recommends that the researcher prepares thoroughly for the interview to eliminate most if not all of the problems that may inhibit or destroy the willingness of respondents. During the interviews, this researcher constantly bore in mind the objectives and aims, waited patiently for the right opportunities to solicit vital information, timed when and how to ask the essential questions, and allowed the respondents some leeway, despite their tendency to veer off the given course or follow their own agenda. This researcher also bore in mind the sociology of the interview – respond to and follow the style and tone adopted by the interviewees and strike a balance between ignorance or innocence and knowledge, lest the interviewees think there is no purpose served by the interviews (McHugh, 1994).

Information gathered from the interviews was useful to assess the extent to which CXC examinations have successfully replaced British-based exams and cater to the needs of Caribbean peoples rendering them suitable to successfully exist in the global village of the 21st century. Scott and Usher (1999) posit that the timing and length of an interview are chief determinants of control. These factors impacted the researcher’s. Because it is usually difficult to schedule meetings with these officials

due to their responsibilities and schedules, sometimes face-to-face interviews were replaced by email interviews. It was anticipated that the interviews would have been conducted over a six-month period, but this continued for more than a year, as repeated efforts were made to schedule interviews or get some respondents to return their answers to emailed interview questions.

Each instrument has a series of questions that are relevant to the particular individuals. Information was sought on the rationale, preparation for, views on the impact of and the overall assessment of the CXC examinations. Questions for the CXC officials focused on the rationale, philosophy, achievements, strengths and weaknesses and challenges that are faced. For the Ministry of Education officials, the focus was on the policy issues, the extent to which the colonial inheritance impact the policies, structural and economic resources available to education, the agreements with international agencies, the preparation of staff for the CXC examinations, and their assessment of the success and failures of the examinations. The educators were asked to assess the level of preparedness for tertiary education that the CXC graduates bring to that level. They were required to evaluate the performance of the graduates against their GCE predecessors, in a bid to ascertain if the cries about the irrelevant colonial examinations have been silenced by CXC examinations. Two different teachers' colleges were contacted repeatedly; the principals even took the interview schedule to facilitate familiarization, but despite repeated calls and emails, they never agreed to interviews nor submitted the responses electronically. It was noticeable from feedback received from the interviewees, that generally, the institutions do no analysis of their entrants' qualifications and the impact of their certification on their performance at the tertiary level. The industry officials were required to evaluate the extent to which the graduates are adequately prepared to enter and perform effectively in the workforce and the global environment. Indeed, one of the areas of focus is the manner in which globalisation, as a new form of colonialism has subtly hijacked education systems, placing demands on curricula and student preparation. All participants were asked to assess the current performance of CXC and forecast the future development of CXC in order to gauge their effectiveness and ability to meet

the demands of the future of education in a neocolonial environment. (See Appendices for sample instruments).

Documentary and Secondary Data Analysis

Secondary data analysis of the results of examinations was done. A comparison between the attainment rates of students doing CXC and GCE examinations was undertaken. Descriptive statistics were used to facilitate the analysis. A sample of the years was taken. The results for the initial year – 1979 and two academic years in each decade were scrutinized for CSEC Examinations: 1980 – 1982, 1990 – 1992, and 2000 – 2002. This data may now seem to be historical because of the gap in time when this research began in 2003 and now, when the thesis is being presented. However, data regarding the overall success rates in CXC exams for recent years have been included in Chapter Three. These data help to highlight whether the elite gap that existed under the colonial system is still evident in the success rates of the masses among the student population.

Since the CAPE examinations had only recently been introduced, all the years up to 2011 were examined. Additional information on success rates have been included in Chapter Three. It would not have been fair to compare the CXC and GCE results for all the years, as in many cases, by 2000, most schools had discontinued entering students for GCE examinations. It may prove to be advantageous to examine GCE data before the introduction of the CXC and in the decades of the eighties and nineties – hence 1970 – 1972, 1980 – 1982 and 1990 - 1992. This proved to be challenging, as in many respects, schools have totally discontinued the Cambridge and London examinations, thus the findings may be considered to be skewed in favour of CXC. To avoid bias and ensure balance, percentages of total population who sat the examinations were used.

It was easier to access the CXC (CSEC) results as they publish annual reports with details of success rates each year. *The CXC Examiner*, a magazine published by the Council and their Annual Report for multiple years were used to access data. Subject reports were also scrutinized. Additionally, in recent years, the National Council on Education, Jamaica, in their Annual Reports publishes the results of the examinations across the island, detailing what obtained in each school. The

researcher is well aware that various variables impact on success and failure rates and these were taken into consideration. An investigation into the total secondary school cohort was also done to assess the extent to which the examinations cater to the secondary school population. Because of the variety of examinations that are done at the secondary level and the fact that students can choose which ones they will do, it was useful to focus on Math and English as these are mandatory for all students. This is useful to assess the extent to which the students in the age cohort embrace the opportunity to sit CXC examinations and the extent of their success.

The researcher analysed reports published by government, the examination boards and major stakeholders and or experts in education who analyse the results for CXC examinations every year and publish their findings in the national newspapers. The newspapers also publish columns and editorials written by their writers each year after the exam results are made available. Syllabuses from both CXC and GCE for mathematics and English are analyzed. Documents and records are important tools for qualitative research because generally, they can be easily accessed at low cost. Yin (2003, p. 87) suggests that “the most important use of documents is to corroborate and augment evidence from other sources.” Additionally, as Hodder (1998) notes, “the information provided may differ from and may not be available in spoken form and because texts endure and thus give historical insight” (p. 111). These records and documents usually paint a different picture than that portrayed by persons whose memories may be affected by time. “Texts can be used alongside other forms of evidence so that the particular biases of each can be understood and compared” (ibid.).

This researcher is mindful of the fact that the manner in which the information is organized and analyzed as data, conditions under which the documents were produced, the intended audience and the purpose for which they were intended could determine the nature of the data. Indeed, texts “reproduce power and inequalities in society” (Peräkylä, 2005, p. 871). Additionally, “documents must be carefully used and should not be accepted as literal recordings of events that have taken place (Yin, 2003, p. 87). Instead, they must be seen as versions of reality constructed by individuals (Peräkylä, 2005). This researcher bore all these facts in mind while using these sources to shed light on the unit under analysis and

noted that data presented from different sources – The Ministry of Education, National Council on Education, Statistical Institute of Jamaica and the Caribbean Examinations Council – did not always cohere. The information officer at the Overseas Examinations Office provided a possible reason for this. She explained that in some instances, results published may have been provisional results which were subsequently revised, hence the discrepancy.

The focus of the syllabus analysis was on aims, objectives, content, methodology, and assessment. The researcher evaluated the relevance and appropriateness of these syllabi in preparing students to function firstly in their national context and secondly in the global environment. This also proved to be a challenging task as all the examination boards revise their syllabi periodically and thus it was not easy to acquire comparable revised syllabuses for the areas being considered.

Questionnaire Survey

Some interviews and examination of documents was done initially to get basic information about the CXC examination system and the factors that led to its adoption. Then the survey was conducted, guided by the findings. Other interviews and document examination followed the survey, to fill in any gaps in the knowledge that were still evident. Surveys are ideal data collection measures because they, “provide a relatively simple and straightforward approach to the study of attitudes, values, beliefs and motives. They may be adapted to collect generalizable information from almost any human population” (Robson, 1993, p. 128 – 9). After conducting a pilot study with five teachers, the survey was done among twenty teachers from a typical co-educational secondary school which used to enter students for GCE Ordinary and Advanced Level examinations and now enter them for CXC examinations. Teachers from both the lower and upper secondary school system that teach or have taught both CXC and GCE examinations were included in the sample. A cross-section of teachers who teach the Arts, Business, the Social and Pure Sciences, and Vocational subjects was included. This group of teachers is used to exemplify typical teachers who teach at the secondary level across the region or in small states. It may be argued that they may not be representative, but in a case

study, one entity can in fact be chosen as a case. Additionally, this school was also chosen based on convenience sampling. The fact that the school was established from the 1940s by a religious denomination and is now grant aided by the government is important. Additionally, it is one of the few schools in that region that had a long-standing, reputable post sixteen, A'Levels programme and now offers subjects at the CAPE level.

A questionnaire was used to collect information. Brown and Dowling (1998) suggest that “questionnaires are particularly useful for gathering simple information on *what people do or have done* and *what people know*. ... It is possible to use a questionnaire to explore *what people think or feel*” (p. 69, their emphasis). The questionnaire was closed-ended with 25 items. Closed-ended questions are easier to code, process, and analyze although they force respondents to think in a particular way and limit their spontaneity, expressiveness and thoughts. In addition, there is the possibility that the richness of data that could be accumulated via open-ended questions may be lost. Notwithstanding this disadvantage, closed-ended questions afford the researcher the opportunity to lead the respondents in particular directions that are directly related to her focus or emphasis. Additionally, quantification is straightforward and more questions can be asked and answered in less time.

Seven of the items use the five-point Likert scale structure. Oppenheim (1992) cautions that although it is best to have uneven steps to facilitate a neutral category, many raters are afraid of using extreme categories; thus the researcher has to be wary of this “error of central tendency” (p. 233). These items sought to measure the teachers’ opinions, attitudes and beliefs about the benefits that students receive from doing CXC exams. The researcher is well aware of the fact that it is more difficult to ensure reliability and validity of questions that focus on respondents’ attitude and so various participants were used to ascertain facts and independent sources were used as external checks to validate the information. Teachers’ views on their own qualification and preparedness, years of service; the features, strengths and weaknesses of the syllabuses and examinations and their impact on students were solicited. (See Appendix 5 for letter to the school principal requesting permission to conduct the survey and questionnaire.)

It was not difficult to gain access to the school. Purposive or convenient sampling was employed in choosing the school as the researcher had worked there before and knew a mediator who would administer and collect the questionnaires. The principal was contacted via telephone and an official letter followed. He gave permission for the researcher to approach his staff to collect data. Various factors had to be considered in this aspect of the data gathering, as teachers are extremely busy people, thus national and school functions and examinations may have limited the effectiveness of the data. Upon having gained access, the researcher used a teacher on staff to act as mediator to distribute and collect the instruments. They were given the questionnaire and allocated a maximum of two weeks to complete them. The mediating teacher collected them all for the researcher. The fact that the intermediary is a long serving member of the senior staff, who most respect, may have facilitated the return of all the questionnaires.

The use of multiple methods to collect data is desirable to check for representativeness; triangulation facilitates validity (Miles & Huberman, 1984; Thurmond, 2001). Multiple sources and modes of evidence are ideal to build the triangulation process. This researcher was able to test and / or confirm conclusions, rule out spurious conclusions, replicate key findings, check out rival explanations and look for negative evidence through the use of various data collection measures.

Pilot testing

Pilot testing of the instruments was done to ensure that they were readily accessible for the intended audiences. Feedback from the respondents regarding the nature of the items, duration of the data collection exercise, format and structure of instruments, level of difficulty or ease with which the instrument is navigated and overall effectiveness as a data gathering device were solicited. Respondents indicated that the instruments were easily understood and there were no problems with completing them. Feedback from the pilot affirmed the validity and reliability of the instruments which were then employed to gather data from the targeted sample groups. See Appendix 6 for the methodology matrix which details aspects of the data collection procedure.

Sampling

This research drew on the views of various stakeholders in the education arena and the wider society. Non-probability sampling strategies were employed because the researcher wanted to involve those persons who are known to possess the knowledge and information required to answer the research questions. Cresswell (1994) recommends the strategies highlighted by Miles and Huberman (1994), to decide on the sampling strategy to use. From their typology, this researcher identified two strategies that were applicable for this research: typical cases and convenience sampling. The former highlight the average or normal condition, and the latter saves money, time and effort. Babbie (2001), describes purposive or judgmental sampling as sampling which is done “on the basis of knowledge of a population and the purpose of the study” (p. 179). Although convenience sampling is considered to be unrepresentative, Scott and Usher (1999) suggest that it can be used when it is convenient for the researcher “to take a snapshot of opinion about a particular issue” (p. 71). It would be non-productive to include people who have no knowledge of the subject matter as they would not be able to speak to the issues under consideration.

It was hoped that six in depth, elite interviews would have been done with each category of informants. Oppenheim (1992, p. 68) recommends that “quality, rather than quantity, should be the essential determinant of numbers.” This is a factor that encouraged this researcher’s decision. Additionally, the researcher believed that the targeted sample would be able to present the required perspective of the population. Educators from five tertiary institutions - universities, teacher-training colleges, community colleges, vocational training institution, and nursing school – were included to get the views of the administrators on the calibre of graduates possessing CXC and GCE qualifications that pursue tertiary studies. This exercise was not as easy as anticipated. The input of two principals of teachers’ colleges was solicited. They agreed but despite numerous calls, emails and face-to-face reminders, the efforts proved futile. Some of the other respondents were keen to point out that they had not done research in the area (comparing CXC versus GCE entrants) and so they were only able to provide limited facts and undocumented opinions.

Ministry of Education officials were targeted to get the perspective of the government regarding their involvement with and decision to embrace the CXC exams. In this area, it was found that the key personnel that the researcher thought would have provided valuable information were unwilling or unable to speak to the issues, so they recommended six other officers who were directly connected with the Secondary Education System. Nevertheless, a diverse cross section – including employees in the rural and urban areas and covering three different regions – was included.

Officials from the CXC were included to get the views of the examining body on the exams that they offer – their impact, effectiveness and prospects. It was not difficult to access the markers as many of these were personally known to the researcher. Three were selected from among various subject areas. Other personnel, when contacted, indicated that they were not able to speak in an official capacity for the Council. One past Council member still responded to the interview questions that had been emailed to her and provided valuable insights into the work of the Council even though she made it clear that she was not speaking on behalf of the Council. Two others were official representatives of the Council; thus, a cross section of views was garnered from the six CXC officials.

Personnel managers from six prominent industries (hotel, services, mining and energy, manufacturing, agriculture, tourism) were targeted to get information on the suitability of CXC-qualified graduates to the working environment. It was the researcher's belief that the end users of the graduates would be best able to testify of their preparedness for the real world. Regrettably, some of the firms that were contacted (for example those in Mining and Energy, and Industry) indicated that they did not employ CXC graduates but rather relied on university graduates to staff their businesses. Five industry officials were interviewed.

Data Collection Preparation and Procedures

In each case, the institutions or organizations were contacted via telephone and then by letter; subsequently arrangements were made to either do face to face interviews with the designated representatives or to send emails to solicit the information. Representatives from all four target groups who were not available due

to lack of proximity or unavailability for physical meetings, agreed to answer the questions and submit their responses electronically. In these cases, the interview schedule was sent via email and the respondents acquiesced to the request in a relatively short time. Anonymity and confidentiality were guaranteed; each responded was assigned a letter and number, see Endnotes for Chapter Seven, and the participants were assured that the information would only be used for academic purposes.

After permission had been sought from the principal of the targeted secondary school, a pilot test, involving five teachers, was done. Their minimal comments and observations, related primarily to format and not content, were used to upgrade the instrument which was then implemented among twenty teachers. See Appendix 7 for sample letter to respondents soliciting their criticisms to improve the eventual instrument.

Data analysis strategies

Brown and Dowling advise that the power of data analysis will depend on various factors including the “the internal explicitness and coherence of the theory ... and the integrity of the concept-indicator links” (1998, p. 81). Efforts were made to ensure that the findings are directly related to the theoretical and conceptual framework and the existing literature; the researcher brought together the theoretical and the empirical field. As Yin (2003) recommends, rival explanations for findings are also accommodated.

Various strategies are employed to present the data. Tables, charts and graphs are used to help with “visualizing the information and representing it” (Cresswell, 1994, p. 140). These graphical and/or pictorial representations are useful to elucidate the data and help the reader to fathom information presented. The researcher charted the responses from each respondent on a grid, combed through the data to identify patterns and themes and then categorized data to get a full understanding of the case to examine the variables at work and find answers to the research questions. Thematic analysis has been employed based on the observable trends among the responses. See Appendix 14 for screenshots of the manual tables created and table charting some of the themes that emerged from the data.

Descriptive details, classification and interpretation were done to make sense of the data. Interpretive analysis and typologies as recommended by Hatch (2002) are also embraced. Descriptive statistics, focusing on percentage scores of students' achievement in each subject are used to present and help to analyze the quantitative data.

Limitations

Various factors impacted the outcome / findings of this research project:

- Not many Jamaican schools still enter students for both CXC and GCE examinations.
- Syllabuses change over time so the ones which the researcher has examined may very well have been revised already.
- Some potential respondents were hesitant and reluctant to be interviewed.
- Some of the sample identified from among the tertiary institutions did not have any record of their intake so they were unable to speak convincingly to the issues raised.
- It may be difficult to isolate and assess the extraneous variables that impact on students' performance. These include: new technologies, availability of new textbooks, assessment modes; changes in the preparation of teachers, pedagogy, teaching strategies and societal trends.
- Some of the CXC and government officials may not have been open and totally honest with their evaluation, in an effort to protect their institutions.
- The subjectivity inherent in the qualitative researcher's perspective of reality that is constructed is also a potential limitation to this research. This is due to the fact that researchers "... are not invisible neutral entities; but rather, they are part of the interaction they seek to study, and they influence the interaction" (Fontana & Fray 2005, p. 716). This is undergirded by the fact that "... interviews are seen as negotiated accomplishments of both interviewers and respondents and are shaped by the contexts and situations in which they take place." Thus it is impossible to extract the data from their contexts and proclaim them to be objective.

- The researcher's skills and aptitudes in designing, conducting and reporting research also limited the results of the study. Richardson and St Pierre (2005, p. 960) remind us that success in qualitative research depends on the researcher. "The more honed the researcher, the better the possibility of excellent research." With limited experience in conducting research of this nature, no doubt the results are impacted and may have been different with more experience and expertise.

Ethics

Various ethical issues impact research. The researcher must give due consideration to and ensure that ethical principles are adhered to while designing and conducting research and when reporting on research findings. Fontana and Frey (2005, p. 716) citing Johnson (2002, p. 116) remind researchers that "the most important ethical imperative is to tell the truth." This was the chief guiding principle, notwithstanding personal preferences, feelings, ideologies or biases. Issues of informed consent, right to privacy, honesty, confidentiality and anonymity are all ethical concerns that were borne in mind. Gay (1996) makes the following suggestions:

Even if there is no risk to subjects, they should be completely informed concerning the nature of the study....The subject's right to privacy is also an important consideration.... any information or data which are collected ... should be strictly confidential ... data... should not be associated with subjects' names or any other identifying information. Access to the data should be limited to persons directly involved in conducting the research. (p. 85)

This researcher embraced and adhered to these suggestions; all participants were duly briefed about the nature, purpose and scope of the research and were assured of anonymity and confidentiality. For the survey that was done among teachers, the researcher ensured that a letter was sent to the principal to gain entry to the site and his approval sought before administering the instruments. Confidentiality and anonymity were guaranteed and the promise honoured. Respondents did not have

to write their names and even if they could be identified by the researcher, they were not identified in the research; neither was the school identified by name or description.

The researcher took pains to ensure that the relationships that existed between her and the respondents remained professional and unbiased. This researcher is familiar with some of the respondents and is well aware that this could impact - positively and negatively - on the findings. Some may have just revealed what they think the researcher wanted to hear in a bid to help her cause. Brown and Dowling (1998, p. 74) caution that "... even more care has to be taken in considering the effects that this may have..." on the data collection process.

Another ethical dilemma results when some researchers are tempted, when reporting their findings, to skew the information to ensure that their hypotheses are proven true or to validate their perceptions and positions. Semel (1994) suggests that it is important to bracket out self from research process but difficult to do so. It is easy to 'go native', so reflection on self and action is necessary, especially when the information received from documents and informants does not cohere with personal knowledge and experience. Richardson and St Pierre (2005, p. 962) attest to the fact that "knowing the self and knowing about the subject are intertwined." It is therefore important "...to understand ourselves reflexively as persons writing from particular positions at specific times..." (ibid.). Being mindful of the personal interest in the research, this researcher endeavoured to be honest and with the help of the triangulation process, be as fair as possible in the analysis and presentation of the findings, even though Semel (1994, p. 209) posits that "complete objectivity is a myth of positivism."

Despite identified limitations, through the utilization of varied methods of data collection, the researcher ensured triangulation and collected data to assess the extent to which, despite policies, problems and pressures, the CXC was able to successfully introduce secondary qualifications in Jamaica. Scrupulous measures were adopted to promote high ethical standards and ensure validity and reliability.

The ensuing chapter will present data gathered from various stakeholders, which will be assessed to evaluate the verity of the CXC's success and the extent to which the Council has successfully replaced GCE examinations in Jamaica, despite

the problems, pressures and policies that have impacted their operations. These include policies of international corporations, the problems of management, structure, equity, access, quality, performance and standards. This success must be gauged in light of the postcolonial intentions of the architects while evaluating the extent to which the Council has been able to meet the transformational needs of the region yet remaining current and relevant and preparing students for the global environment. The ensuing chapter will present the findings from the data collected to answer the research questions.

CHAPTER SEVEN

PERCEPTIONS REGARDING THE POLICIES, PRESSURES AND PROBLEMS THAT IMPACT THE PROGRESS OF CXC IN JAMAICA

Introduction

This chapter presents the findings garnered from various sources and stakeholders that evaluate the extent to which CXC, through CSEC and CAPE examinations, has successfully replaced colonial examinations in Jamaica. Data were collected through interviews with CXC officials, including markers, representatives of tertiary educational institutions which cater to CXC graduates, and workforce representatives. A survey was undertaken among 20 teachers in a high school to capture their perspectives, and examination statistics for selected subjects over specific years were analyzed to evaluate the performance of the students on both CXC and GCE examinations. Selected subject reports, syllabi and public reports by stakeholders are also critically analyzed.

The data identify and assess the problems, pressures and policies that impact the progress of CXC in Jamaica and are presented thematically in keeping with these major areas, in relation to contributing factors. The themes emerged naturally from the data collected among the interviewers which are related to the literature and were interwoven among the questions asked. These include international agencies', government's and stakeholders' policies; the irrelevant, inherited curriculum, and perceptions regarding the syllabuses, assessment, certification and students' performance. Relevant information is drawn from varied data sources to elucidate the themes and evaluate the extent of CXC's effectiveness.

The interviews

As outlined in the previous chapter, four groups of stakeholders were interviewed. Managers of organizations that employ CXC graduates comprised one group. In Jamaica, there are various organizations that employ graduates from secondary schools with CXC certification. In order to assess the extent to which the Council has equipped successful candidates with knowledge and skills that the

workplace requires, the perceptions of some of these employers were sought. Initially, some key industries (banking, manufacturing, bauxite) were selected, but enquiries with one of the leading bauxite companies, a key manufacturing company and the bank with the most branches island wide revealed that they do not employ high school graduates in key areas. They target holders of first degrees or experienced workers and rarely employ high school graduates. Consequently, employers of high school graduates were approached; these were from various sections of the island and spanned rural, sub-urban and urban areas and the three counties: a hotel on the north coast which is a key industry leader that offers an all-inclusive product, a prominent furniture and appliances store, a parish library, a government collectorate - principal collector of taxes and fees for the government - and a job placement firm. Others, including a Chamber of Commerce representative, who consented to be interviewed, were elusive and their views were not secured. See Appendix 8 for sample interview schedule and a completed schedule that was returned via email.

Representatives of tertiary institutions, which offer training to CXC graduates, comprised a second group. One of the chief functions of terminal secondary qualifications is to identify those graduates that would make good students at the tertiary level. Consequently, it was believed that these representatives would provide valuable insights into the extent to which CXC adequately prepares graduates for further studies. Two universities, one in the urban and one in the rural area, a community college, a nursing school, and a technical/vocational training institution were successfully engaged. Efforts to include a teachers' college (which traditionally admits many CXC graduates) failed. See Appendix 9 for sample interview schedule and answers for one interview.

Ministry of Education officials with responsibility for secondary education comprised the third group. They were included in the sample to gain the official government view regarding the CXC and the extent of the Council's success in Jamaica. Officials were included from across the island, from three different regions, each in a different county. Two officials from each region were engaged. It was hoped that as representatives of the government, their views would be the

government's position regarding CXC. See Appendix 10 for sample questionnaire and completed interview schedule as emailed by one of the participants.

CXC officials were the fourth group. They were considered important as sources to ascertain their perceptions of the Council and the extent to which CXC, through its curricula and examinations, has carried out its mandate and assess whether or not it has successfully replaced GCE examinations. The CXC representatives included in the sample were diverse. Three were teachers who taught different subjects – Geography, English Literature and Communication Studies - and marked CXC examinations. The others were a former registrar who was insistent that it be clear that she was not speaking on behalf of the Council, a syllabus officer and a pro registrar who had formerly been a key player in the government's Ministry of Education.

Like the respondents, their views were diverse. In some instances, respondents were ignorant of what obtains, and in other areas, they chose to offer no response. The advantage that the researcher had with this sub-group was the opportunity to interview all but one of the officials face-to-face. This allowed for probing and clarification of information (Robson, 1993). Thus, the findings seem to be more expansive than what obtains for the other sub-groups. Additionally, this group had more questions asked of them than the other groups as they were thought to be more capable to speak to the work of the Council. In some instances, questions that were posed to the officials were not asked of the teachers/markers and vice versa as they were considered to be best suited to answer those questions that were relevant to their involvement with the Council. See Appendix 11 for sample interview schedule and transcript of an interview.

Due to geographical and time constraints, it was not possible to interview some of the respondents. The interview schedule was emailed to those who indicated that they would be willing to submit their views electronically. Despite the inherent limitations, this was done to take advantage of as many views as possible (Fontana & Frey, 2005; Brady, 2004).

Because of the small size of the sample group in each category - five or six - the findings are not being reported quantitatively but qualitatively, with close attention paid to presenting the exact words of the speakers. Despite the benefits

that could have been reaped, due to the fact that not all interviews were face-to-face, the researcher did not interpret body language, proxemics and gestures, as these were not available for all. The focus is on the text of the interviews.

The survey among teachers

In order to assess the effectiveness of CXC from the perspective of teachers, a small survey was conducted among a convenience sample of 20 teachers who had years of experience with both CXC and GCE examinations in a typical traditional high school. This is a well-established grammar school which initially catered to middle class children who had been successful in the Common Entrance Examination. The sample instrument is available in the appendices. This purposive sample was comprised of 13 females and 7 males. Their ages ranged from the 26 – 30 category to an over 45 group. The latter category had the most respondents (6 or 30 percent), while the former, along with the 41 – 45 age group, had 3 (15 percent) respondents each. The other two categories had four (20 percent) respondents each. The bulk of the sample had been teaching for over six years. The majority - six (30 percent) had been teaching for 16 – 20 years while five (25 percent) had been teaching for 6 – 10 years. Half (50 percent) of the respondents had been teaching at the exam level for between 11 and 30 years.

All the respondents had taught at the CSEC level and 12 (60 percent) had taught CAPE subjects. Only three (15 percent), have taught GCE O' and A' Levels. Notwithstanding this, it was evident that the bulk of the sample have had experience with both examinations as 17 (85 percent) had sat GCE O' Levels, 10 (50 percent) GCE A' Levels and 11 (55 percent) had done CSEC examinations. A total of 17 (85 percent) indicated that they were extremely qualified to teach the CSEC syllabus. Two (10 percent) did not respond to that question and 1 (5 percent) said he/she was moderately qualified to do so. Only one teacher thought he/she was not prepared to teach the CXC syllabus. The majority – 13 (65 percent) thought they were adequately prepared while 6 (30 percent) thought their preparation was moderate.

Summary

This research drew on a diverse sample of teachers, tertiary level educators, employers, government and CXC officials in order to get a wide cross section of perceptions from varied stakeholders on the factors that impact CXC's performance in Jamaica. Performance data for both CXC and GCE examinations, syllabi and reports from CXC along with reports and papers published by educators and stakeholders in Jamaica are also examined to provide a fuller view and triangulate the comments garnered from the interviews and survey.

In order to present the findings thematically, the major policies, problems and pressures that impact CXC's progress and efforts to offer terminal examinations and qualifications for students of secondary schools in Jamaica are explored. The perceptions of the stakeholders along with performance data, reports from varied sources and documents are all interrogated in order to assess the extent to which CXC has been successful in fulfilling their mandate in Jamaica. Additionally, efforts are made to show linkages and departures from the literature presented in earlier chapters. The extent to which CXC examinations in Jamaica are impacted by external lending agencies, government policies, the lure of internationalization, nationalism, post-colonialism and globalization are all explored. We start by exploring policies.

POLICIES THAT IMPACT CXC'S PROGRESS

Various policies impacted the level of success enjoyed by the Council in Jamaica – the philosophy of the initial architects (government officials from the participating countries), government's and principals' policies, and policies of international agencies and donors. To varying degrees these determined the level of success enjoyed by the Council, so each will be explored individually.

The philosophy of the architects

The initial founders or architects of CXC were the Ministry of Education representatives of various Caribbean territories, government officials and elected educators who established the Council's mandate and working parameters. As detailed previously, the Council was established out of a need to produce locally relevant syllabi and examinations that would replace the colonial examinations set

by the London and Cambridge Examination Boards (Walter, 1982; Bailey, 1996; Griffith, 1999). The CXC (C¹) and Ministry of Education (ME²) representatives were asked to comment on the philosophy that led to the establishment of CXC. Chapter Three has outlined the inception of the Council and the views of the participants in the sample groups are in agreement with the details established from the literature (Demas, 1982; Griffith, 1999; Bailey, 1996; Walter, 1982). The English B marker (CM3), a CXC representative, admitted that she did not know the philosophy underpinning CXC, but all the others offered some views on this. The two other markers emphasized the need to cater to students; however, the Geography teacher (CM2) pointed to “CARICOM and Caribbean integration” as the underpinning philosophy as CXC exams are “part of regional development”. Additionally, she averred that CXC expects “students to produce from theory and be able to apply” and that compared to GCE examinations, CXC is “more Caribbean friendly ... [and] less culturally biased” (CM2). She thus captures the nationalistic and post-colonial ethos of the architects. It is vital that curriculum deliverers be cognizant of the drivers of curriculum. If they are, then they will embrace the philosophy and willingly inculcate this in their charges (Connecticut State Department, 2006).

The former registrar was more expansive in her response, even referring to the Agreement that established “and empowered the Council to ‘develop and conduct such examinations as it may think appropriate and award certificates and diplomas on the results of the examinations so conducted’” (C3). She also referred to the Resolution from the 1973 Conference of Caribbean Ministers of Education:

Conscious of the need for the institution of a new System of examinations for the region;
 Recognizing that such a system should be in keeping with the educational goals of the governments of the region:
 Resolves that the Caribbean Examinations Council should be advised to introduce urgent measures with a view of assuming as early as possible, the full responsibility assigned to it for providing, setting, marking and scoring examinations suited to the needs for the Caribbean societies and relevant to the goals of participating Governments (C3).

The Pro-Registrar echoed similar views insisting that CXC was mandated to create, “assessment instruments accessible to the Caribbean, especially the English-speaking Caribbean” (C2). He also noted that the Council was directed to provide “exams of quality that were relevant to life in the Caribbean” but were also “appropriate for mobility for use elsewhere in the global environment.” Thus, he captured the tension between national and international demands. He emphasized that relevance was a key issue in the creation of the examinations and that the “content is grounded in the reality of the Caribbean and the wider international environment; as students must be able to function at home and abroad” (C2). The Syllabus Officer reported that the philosophy spoke not only to education but also to “colonial departure.” This is in keeping with the view of post colonialists who maintain that education should serve as a medium to give voice to the voiceless who had been marginalized by colonialism (Ashcroft, Griffiths and Tiffin, 2000; Torres, 2006; Darby, 1997; Unterhalter, 2015).

The Council is bounded by the policies that led to its establishment to deliver a Caribbean product. Clearly, issues of relevance and international appeal are taken into consideration (Munbodh, 1987; Watson, 1984; Young, 1998; Reese, 1985; Bray, 1990; Watson, 1982). Post-colonial and nationalistic sentiments are also evident in the underpinning philosophy of the Council. As revealed by the comments above, those who work for the Council, by and large, are aware of and accept the mandate to meet the needs of and contribute to the postcolonial development agenda of regional governments and peoples (Miller, 1987a; Lindsay, 1990; Fergus, 1991).

Government of Jamaica policies

Various government policies have also impacted and facilitated CXC’s progress in Jamaica (Miller, 1999a; Carlson & Quello, 2002; Dwyer, Harris and Anderson, 2003; National Council, 2005; See also Chapter Four). Invariably, governments use education as a pawn in political warfare; they institute policies that guarantee political victories (D’Aeth, 1975; D’Oyley, Blunt & Barnhardt, 1994; Brock, 1982; Aldrich, 1988; Thomas, 1990). Lindsay (2002, p. 165) concurs: “According to Stone (1986) this was the case because as competitive parties sought to court support from the electorate, they often based their decisions on political expediency

rather than intrinsically educational goals.” Additionally, as signatory to various international treaties including *Education for All*, the UN Millennium Development Goals, and as caveats to grants, aid and loans from the World Bank, UNESCO, USAID and the IMF, the Government is sometimes required to undertake changes in the education system. Conditionalities for IMF loans generally require restructuring and adjusting government agencies and expenditures. The ROSE programme, financed by the World Bank, was instrumental in regularizing grades seven to nine of the secondary school curriculum. As stated earlier, the World Bank, in their development thrust, focus on improving education access, quality and equity and has offered various loans and grants to Jamaica since the 1960s to facilitate progress through education (World Bank, 2007; 2008a; 2008b). Thus, these political and international factors and policies have helped to improve students’ performance and by extension CXC’s success. This success cannot therefore be attributed to the work of the Council nor its effort to fulfil its mandate, as the contributing factors were beyond the remit of the Council. Success was enjoyed not because of, but in spite of the Council.

One change that the Government instituted was a policy that required all government and grant-aided schools to prepare students for CXC, instead of GCE examinations (McKnight, 1982). When asked about the Government’s rationale for this move, Ministry of Education representatives highlighted the postcolonial dichotomy between local and international currency and insisted that it was the best thing for the country because of the regional base: “CXC is local; students are better able to manage”; “to speak to the reality of the region; [it is] broad-based, relevant to students’ culture, students are prepared for the international market.” Two comments captured the ethos that drove the architects of CXC and spoke to the economic factors that were a catalyst for the move:

“It was felt that as a region there was need to further affirm our independence and nationhood by producing our own examination that would eliminate some of the cultural biases that were featured in the British examinations ...” (ME5).

“The mandate was given to reduce the dependence on a foreign exam board and because of foreign exchange concerns, the Jamaican government saw it

necessary to identify with the CARICOM philosophy and a common Caribbean culture” (ME6).

One respondent had a divergent view, which highlights his ignorance of the government’s mandate:

“It was not mandated by government. Schools were encouraged in 1979 and have since bought into the programme. The savings on foreign exchange at a time when it was not easily accessed might well have played a significant role” (ME1).

Officials were asked if the United Kingdom’s decision to replace GCE with GCSE contributed to Jamaica’s decision to embrace CXC whole scale. One person was “not able to comment on this”; another was “not sure” and another indicated that he “can’t say”. One representative from the country’s capital, who had been an educator for more than 20 years, provided insight: “The UK decision had implications for the continuity of Jamaican students sitting the exam in its new format” (ME5). Others clearly were not aware of when the Government had issued the mandate as they referred to the fact that “CXC predates GCSE (ME3);” and “The GCSE came into being after the CXC and was not therefore a factor at that time” (ME1). Whereas it is true that CXC predates GCSE, the former began in 1979 and the latter in 1988, government had not initially mandated schools to prepare students only for CXC; many had been offering both GCE and CXC exams. However, the Jamaican Government, from as early as 1982 had created a time plan for phasing in CXC in various subjects in schools (McKnight, 1982). One of the respondents from the second city encapsulated an overarching view:

“Caribbean governments saw ahead and put plans in place before the GCSE. [They were] *avant garde*, insightful; we are not lacking in vision, they acted on vision, but we have learnt from the Europeans. Our ‘adult’ educated were schooled by the Europeans” (ME2).

Costs of metropolitan examinations have always been a problem for regional countries that sit these exams, thus governments have sought ways of reducing them (Bray, 1998; Miller, 1987a; Fergus, 1991; Bray & Steward, 1998; Sultana, 1999;

Nherera, 2000). Small states have had to grapple with this issue of costs whether they choose to embrace overseas exams or create local ones (Bray & Steward, 1998; Sultana, 1999). Two Ministry of Education respondents had no opinions about the cost implications of the government's mandate to embrace CXC in totality. The others agreed that CXC is "much cheaper" and helps the country "save on scarce foreign exchange resources." In their estimation, CXC was welcomed because of the "movements of the value of the pound sterling against the Jamaican currency." Despite these savings for the students, one opined, "governments in the Caribbean would have to jointly stand the cost of all the administration processes involved in formulating and implementing an examination" (ME5). These economic issues force some small states to depend on metropolitan examinations (Macdonald, 2001; Noah & Eckstein, 1988; Brock, 1988).

Some small states, such as the Bahamas, have forged relationships with metropolitan examination boards that ensure tailoring of syllabi and examinations in keeping with their national goals and emphases. Ministry of Education respondents were asked if Jamaica had ever entered into negotiations with London or Cambridge Examination Boards to have them localize content of syllabi for special examinations for Jamaica. They were ignorant of this: "Uncertain." "Don't know." "Not sure." "I am unable to respond to this item." "Can't say if there were any negotiations, but if there were, it didn't work." Despite ignorance of this particular issue, one respondent had postcolonial, nationalistic insights into how the government dealt with this problem:

"I am not aware that any such direct negotiations would have taken place although over time, a number of subjects were 'Caribbeanized' including History and Geography. The setting up and funding of the CXC by the Caribbean governments would have been a deliberate action that would facilitate greater influence than could have been exercised over either London or Cambridge" (ME5).

Government's restructuring of the education system

Another government policy that positively affected CXC's success in Jamaica was the restructuring of the education system from four types of secondary schools,

to two – secondary and technical in 1998-99 (Cummings & Morris, 2004; National Council on Education, 2005). This was a historic move that increased access to secondary education and ensured a massive increase in students who were eligible to sit CXC examinations. The number of students sitting CXC exams mushroomed after 1999, because those who were formerly ineligible to sit the CXC exams because they were not done in their schools, could now sit them. The newly upgraded schools were now considered as being in the same category as traditional high schools. Some stakeholders bemoaned this fact, indicating that these students were not adequately prepared to sit CXC exams and thus their performance negatively impacted the national average in all subjects (Cummings & Morris, 2004; Thompson, 2003; Minott, 2004). Consequently, even though this policy may be considered as a positive, reinforcing factor that facilitated CXC's success, it may also be considered as a negative influence when taken in this light.

Representatives of the Ministry of Education were asked to provide insight into the Government's preparation for teachers in the upgraded high schools to teach for CXC exams. They reported that government's role was not a "dominant" one, although "training sessions were held nationally." During the initial phase when subjects were being piloted, "much training was done of teachers of the subjects piloted." One official said that, CXC "held numerous teacher seminars and workshops... to acquaint individuals with the format of the CXC exams and to influence a change in perspective and attitude" (ME5). The CXC Pro-Registrar also attested to the training that the Council provided for teachers: "Summer workshops were offered via UWI. Six-week summer camps were held for Maths and Sciences for the teachers in the system who would be delivering CSEC" (C2). Despite this, the Pro Registrar stated, "The biggest challenge would have come from the introduction of SBAs and for teachers to be seen through this component" (C2).

Government officials concurred with the Pro Registrar. They indicated that preparation for teachers of the upgraded high schools was done primarily "through training programmes." One noted that, "Teachers were retrained at the University of the West Indies in various seminars and workshops and schools were equipped with new physical infrastructure...." (ME5). Apart from this, teachers are exposed to the:

“CXC workshops in the various disciplines to be examined; teachers are mandated to attend these. They are charged to ensure that information is cascaded to other members of staff in their schools. Texts are recommended, and the requisite syllabi are made available” (ME6).

For one region, the official reported that initially, “the new secondary schools were not as prepared, but as need arises then they were better prepared. [Thus] some new secondary schools are performing much better now” (ME1). This admission could also be applicable to other regions, as the results for the students in these schools were initially poor and in some persons’ minds, this contributed to the overall poor performance of the national cohort of students. An examination of the overall performance of students in selected subjects across two decades (1990 – 1992 and 2000-2002 as depicted in Table 7.1 and 7.2), before the restructuring and after may help to highlight the impact that the restructuring had on the numbers of students who sat CXC examinations and their performance. Based on the data, we can intimate that government policies aided and positively impacted CXC’s success and students’ performance data. Thus confirming, once again, that the Council cannot lay total claim to improvements in students’ performance as factors outside of their remit impacted students’ success.

The second decade after CXC was introduced saw many more students entering for the exams and fewer entering for GCE O’ Levels. By then, the majority of the students were opting for General Proficiency examinations as many organizations and tertiary education institutions and employers refused to accept the Basic Proficiency qualifications. Hence, only the General Proficiency examinations’ results are presented.

**Table 7.1 Performance of Jamaican students in selected subjects
in CSEC and GCE O' Level 1990 – 1992**

Subjects	1990	1991	1992
Agri. Science CXC	(475) 18.5	(391) 30.1	(397) 81.1
GCE	(356) 43.3	(299) 39.1	(212) 46.2
History CXC	General (4,208) 39.2	(4,037) 51.2	(3,973) 60.5
GCE	(1,584) 41.5	(8,100) 41.6	(316) 38.9
English A CXC	General (13,804) 28.8	(13,855) 26.2	(13,725) 24.5
GCE	(7,369) 34.9	(8,100) 41.6	(2,272) 29.4
Maths CXC	General (11,640) 25.7	(12,105) 28.4	(12,387) 27.8
GCE	Maths B (3,615) 6.9 Maths C (361) 2.8	(346) 5.2 (2,980) 6.0	(71) 8.5 (834) 15.6
Principles of Business CXC	General		(7,157) 85.4
Commerce GCE	(1,168) 23.7	(1,156) 25.8	(176) 20.5
English Literature CXC	(4,485) 34.0	(4,612) 44.1	(4,539) 56.8
GCE	(185) 29.7	(206) 35.9	(20) 10.0
Food & Nutrition CXC	(1,103) 53.7	(1,212) 62.2	(1,572) 87.3
GCE	(164) 44.5	(132) 34.1	(2) 0

Sources: Overseas Examination Office Reports; CXC Statistical Bulletins

() Numbers in brackets indicate the number of students who sat the exams. This is followed by the percentage of students successful in the exam.

As with the former decade, as the number of entries increased for CXC subjects, they decreased for GCE subjects. It is also interesting to note the trend in Food and Nutrition; although less than a thousand students used to enter for the GCE exam, in the first year when CXC offered the subject, more than a thousand sat it. The success rate has always been more than 80 percent, unlike GCE, for which the pass rate had been less than 50 percent on average. The fact that the content of the course was now regional, students could see themselves and their dietary demands replicated and they could relate to the culinary requirements may have contributed to this. Indeed, relevance of content, a recurring complaint with colonial examinations, is a major concern of small states and a chief contributor to students' interest and performance in this case.

**Table 7.2 Performance of Jamaican students in selected subjects
in CSEC and GCE O' Level 2000 – 2002**

Subjects	2000	2001	2002
Agri. Science CXC	General (935) 87.6	(1,043) 91.6	(1,263) 84.9
GCE	(300) 44.67	(294) 43.54	(231) 48.92
History CXC	General (5,055) 56.2	(4,293) 68	(4,746) 58.2
GCE	(1,274) 43.80	(1,197) 41.94	(1,094) 45.4
English A CXC	General (18,316) 47.9	(18,768) 57.9	(19,638) 53.7
GCE	(8,834) 37.07	(7,578) 31.37	(2,104) 31.50
Maths CXC	General (16,095) 37.4	(16,558) 30.3	(17,124) 36.0
GCE Syllabus D 2001 and 2002	(15) 6.67	(753) 4.25	(724) 3.1
Principles of Business CXC	General (7,508) 80.5	(7,070) 76.4	(7,256) 80.7
Commerce GCE	(231) 16.45	(198) 15.15	(141) 21.2
English Literature CXC	(6,767) 56.2	(6,823) 48.8	(6,662) 58.2
GCE	(36) 0	(28) 0	(37) 8.1
Food and Nutrition CXC	(2,940) 87.0	(3,217) 83.0	(3,375) 84.6
GCE	(27) 55.56	(39) 56.41	(39) 56.41

Source: Overseas Examination Office Reports

Numbers in brackets () indicate the number of students entered for the exams. This is followed by the percentage of students successful in the exam.

Still, only a small percentage of the eligible age cohort sat the exams. For example, in 2001, only 45 percent of the grade eleven students sat English A and 39 percent sat Maths (See also Dwyer, Harris & Anderson, 2003; National Council on Education 2012). This makes the rate of success even poorer when one realizes that less than 50 percent of the eligible students sat the exams. So, despite the over 50 percent success rate in English A, the reality is that this pass rate represents less than a quarter of the number of eligible students. In 2002, approximately 27 percent of traditional high and 57 percent of technical high schools entered less than 60 percent of the grade 11 students for Maths. A total of 21 percent of the traditional high and 36 percent of the technical high schools entered less than 60 percent of their students for English (Munroe & Morris, 2003). The CXC cannot be blamed for

this, as they do not dictate who sit the exams. This is the purview of the schools and by extension the government or Ministry of Education.

Thus, even though government's restructuring led to increases in the numbers being entered for the exams, the overall cohort was still underrepresented at the terminal exams and the pass rates in some subjects were still perceived to be too low. This posed a problem and attracted the criticism of the public (Dwyer, Harris and Anderson, 2001; National Council, 2005; Minott, 2005; Thompson, 2003; Steer, 2004; Ministry of Education Youth and Culture (MOEYC), 2004).

Consequently, the Ministry of Education officials were asked to assess whether or not the performance of students in the newly upgraded high schools impacted the overall performance of students in CXC exams. Most denied this link and noted that the "criticism is not fairly distributed (ME1)" and that "the problem also presents itself in the traditional high schools (ME6)." Additionally, one official, in defense of the government measure to upgrade the new secondary schools, insisted that "some of the criticisms are based on misinformation or misinterpretation of the data. ... The pass rate may well have declined but the actual numbers of students passing would have increased resulting in more qualified persons in the country" (ME4). One respondent affirmed, "Some new secondary schools were performing above" the traditional high schools (ME1). Two of the ministry officials pointed to the nature of students who attend the new secondary schools as a contributor to their performance. One noted, "The ranking of students and placement at schools" resulted in students with low scores in the terminal examination at primary schools being sent to the newly upgraded schools. Now, however, he pointed out, there is "a different strategy; students with high scores are being sent to the newly upgraded schools now resulting in better results" (ME1).

The Pro-Registrar also added his comments. He indicated that he was "hurt sometimes at the level of criticism levelled at some of the schools because some do well." He pointed to Black River High, a newly upgraded high school that was doing better than Monroe and Hampton, which are long established traditional high schools with a history of excellence. Black River was sending more students to the exams, thus despite the high percentage of passes to the traditional high schools, numerically, "Black River was doing better than St. Elizabeth Technical High School,

Monroe and Hampton in some areas” (ME1). Thus, this government policy redounded both positively and negatively for CXC.

Government paying for students to sit exams

Yet another government of Jamaica policy initiative that impacted CXC’s success was the decision in 2003, to pay for four subjects - Mathematics, English, Information Technology and a Science subject - for all students who qualified to sit them. In the first three years, this initiative cost the government J\$163.67 million dollars for 73,090 entries (National Council, 2005). Government officials were asked about the Government’s rationale for this initiative. All viewed this as a positive step aimed at “...providing access for a minimum of core subjects for all eligible students” (ME3). This strategy was deemed necessary “to enhance access to the examinations for students whose financial circumstances would normally cause them to be excluded (ME6). In the same vein, another official remarked: “This is viewed as a civic responsibility in trying to create access and equity for all students, especially the very poor and vulnerable” (ME5). Yet another concurred, noting that this was done “... to ensure that cost was not a factor prohibiting students from sitting the exams; to provide focus and encouragement for the critical subject areas...” (ME4). Another official reiterated that the government “wants to help all students.” She looked at the bigger picture, intimating the role and function of education: It is “...part of the development process, a catalyst for development of the people. The Government loses sometimes but this is an important element in building a literate society. Negative, antisocial behaviour will diminish” (ME2). In fact, the Government did lose; the National Council reports that the expected impact “has not been realized. ...The data indicate a negative relationship between government financial assistance and the number of students sitting” the exams (2005, p. xiv). Student entry declined for Maths while there was a marginal increase for English and Information Technology; for the sciences, only Physics saw increased number of students sitting the exams. In many cases, after the Government had paid for students’ examinations, they did not turn up for them and/or the pass rates were poor. Then Education Minister, Andrew Holness observed in 2010 that “every year [they] lose

approximately five million dollars from students for whom [they] have paid for but they do not turn up to sit the exams” (*Antigua Observer*, 2010).

Government officials were asked to assess the initiative. The assessment was diverse, highlighting both negative and positive views:

- “It is not taken seriously enough by some parents and students” (ME3).
- “Many students who have had fees paid for exams have performed poorly and some have not even bothered to show up for exams” (ME5).
- “It has been assisting the target group well” (ME6).
- “The initiative serves its purpose of allowing more access to more students across the board. It allows for a better, productive workforce and more confident human beings.... It becomes necessary to engage programmes to better prepare students to account for the opportunity costs involved” (ME4).
- “It is a good initiative; it should be supported by stakeholders; students should pull out all the stops to achieve. The self benefits first, and all other spin offs will come” (ME2).
- It is a “... good intervention but schools’ policies and principals counter the ministry’s efforts... the ministry continues to encourage whole cohorts” (ME1).

By 2010, the government had revisited this policy because of the losses incurred and decided that:

...instead of just giving a flat subsidy [they would]... use the subsidy as an incentive for performance. [Thus] the new policy will see government subsidies going to students who have attained a historic grade that would ensure a pass at the actual sitting of the exam. (*Antigua Observer*, 2010)

The Overseas Examinations Office had no data for GCE subjects for these years. The researcher was advised that they had not received the data as they had not requested the composite results. Obviously although there were improvements in students’ performance in most areas, the performance in English fluctuated and the performance in Mathematics continued to be poor.

**Table 7.3 Performance of Jamaican students in selected subjects
in CSEC 2009 - 2011**

Subjects	2009	2010	2011
Agri. Science CXC	(355) 91.5	(439) 92.2	(410) 96.3
History CXC	(5,465) 62.7	(5,797) 68.4	(5,537) 77.5
English A CXC	(40,409) 53.8	(42,699) 64.9	(42,600) 63 .9
Maths CXC	(38,125) 36.1	(41,240) 39.4	(42,391) 33.1
Principles of Business CXC	(12,691) 81.6	(12,869) 83.68	(12,876) 83.5
English Literature CXC	(7,307) 57.2	(7,809) 81.2	(7,672) 76.9
Food and Nutrition CXC	(4,737) 87.5	(5,174) 92.0	(5,215) 92.4

Source: Overseas Examination Office Reports

Numbers in brackets () indicate the number of students who sat the exams. This is followed by the percentage of students successful in the exam.

Table 7.3 presents results in selected subjects for CXC for 2009 – 2011. The numbers entered for Mathematics and English Language continue to increase over the previous decade; nevertheless, the level of success was undesirable and saw stakeholders complaining about these two areas. The outcry continued in 2012, as the level of performance plummeted in English to 46.2 percent and in Mathematics to 31.7 percent (Hunter & Williams, 2012). This led to the Minister of Education requesting an enquiry into the performance of students by CXC, and diverse principals and stakeholders attributing blame to various factors. The Minister of Education bemoaned the fact that the number of qualified Mathematics teachers across the island is woefully inadequate and the Jamaica Teachers' Association President blamed the deficiencies in the system for students' poor performance. The Minister announced plans to ensure improved performance starting from the primary level and improving the level of competence of teachers. Thus, the government admitted that students' performance was being impacted by not only what the Council did but what the country did not do. Admittedly, these other systemic factors, inherited from colonial days, detailed in Chapter Four, outside the realm of the Council's mandate and remit, impact students' performance in the CXC examinations.

Principals' policies versus government policies

Many secondary school principals have adopted the policy to enter for CXC exams, only those students who pass a screening exam during the first term of the terminal school year when fees are due, even though the exams are in the third term. Ardenne High School, "enters all its students for CXC Mathematics and English Language" and some schools also do this (Bingham, 2003). However, the majority only enter those they think stand a chance to pass. Consequently, despite government's policies to improve performance, due to the policy embraced by many schools to present a positive picture of success, many from the cohort are excluded annually. The Ministry of Education is well aware of this practice and some respondents among the government officials also spoke to this, but nothing is done to ensure that more students are entered for the exams. The National Council on Education in its report on the 2004 exams refers to Minott's 1994 critique of those schools that engage in "a very restrictive screening mechanism" as a way of "making results look good" (Cummings & Morris 2004, p. v). In their 2005 report, the Council also affirms that, "Participation of students in terminal or exit examinations ... is left entirely to the discretion of each school, [with principals] entering only those students most likely to succeed" (p. v). Thompson, (2003, 2004) in lamenting Jamaican students' poor performance, refers to the low numbers from the age cohorts that are entered each year because they want the performance statistics to look good. Thus, this policy, outside the remit of the Council, impacts negatively on the overall performance of students at the examination level.

Government summer camps for Maths and English

Despite the limited number of students that are entered for exams per cohort, the government, committed to the development of the country's human resource and fully cognizant, as postcolonial scholars are, of the importance of education to national development and progress, through policy, continued to find ways of boosting students' success. Another step taken to improve the performance of students was the hosting of summer camps in Mathematics and English among those schools (mostly newly upgraded high schools) that had the lowest results (MOEYC, 2004). The Ministry of Education respondents were asked to account for

this government's intervention strategy. Only one official had a negative reaction. He noted that it was a "... panic response to Dr. Minott's comments" (ME1). The latter had heavily criticized Jamaican students' poor performance in the CXC exams (Minott 2003). The other government officials saw positive benefits of and justified the intervention: "There is an obvious need for improvement in some areas. There are pockets of excellence" (ME3). "The intervention sought to address the needs of those students who will benefit from competency-based assessment" (ME6). One respondent offered an evaluative comment about the intervention: "Strategies are ongoing at all levels of the system to improve performance. The summer camps ... seem to have contributed to improvement in the critical areas as much better results were seen the following year" (ME4). Another commended government's efforts: "The expansion in programmes and services is a step in the right direction. There are a number of initiatives targeting the improved performance of students at the CXC level. Steps are taken to improve performance of Math, Language and Sciences" (ME5). Another respondent's positive assessment of the strategy was insightful as it identified some of the problems that result in students' poor performance, shifting the blame from CXC to the education system: [It was a] "good investment. It has its place. More individualized attention, closer interaction, [more] human resources and materials" were expended (ME2).

These observations of the respondents on Government's policies and strategies seem to suggest that the Council is not to be blamed for the poor performance of students. Inherited problems, some from the colonial education system, infrastructural and human resources issues all impact students' success. Respondents' perceptions of the key problems and pressures that affect CXC's effectiveness will be explored in the ensuing section.

PRESSURES AND PROBLEMS THAT IMPACT CXC'S SUCCESS

In addition to the policies of government and principals that directly impact CXC's success, pressures and problems based on the performance of students, policies and perceptions of CXC from major stakeholders impacted their success in Jamaica. As intimated earlier, school principals' policy to only enter students who

had passed the screening examination is one policy that poses a problem that contributes to CXC's limited success in Jamaica. Undoubtedly, much can be accomplished in the six months of teaching that follow the screening exams, and if students were given the chance, they could pass the exams. However, principals continue to embrace this practice and hence the limited numbers that still sit exams, which impact the percentage of students who are successful in each cohort. Other problems and pressures that impact CXC's success are explored hereafter.

The Public's Perception of CXC examinations

The Basic Exam and Range of Grades

Another problem that impacted the level of CXC's success in Jamaica was the public's perception of and reaction to the range of grades awarded for the examinations. There was discontent regarding the Basic Proficiency examinations. The Council had been mandated to cater to wider cross sections of students than GCE had done. However, in their bid to do this, they earned the ire of some members of the public (Dwyer, Harris & Anderson, 2003; Carlson & Quello, 2002). The CXC Syllabus Officer pointed to the General, Basic and Technical Proficiencies that ensure that practical – technical and vocational – as well as academic subjects were offered to meet the diverse needs of students. The manner in which results are presented shows the knowledge, skills and abilities of all entrants. Grades one to six are assigned and explanations are given that speak to students' capabilities. (See Appendix 4 for explanations to interpret CXC grades.) Yet some school officials prevent students from entering for subjects if they think that they are weak. Why are they not entered for the basic proficiency? Or, if they are not academically inclined, why are they not given the option to pursue the technical or vocational subjects? The answer to these questions may lie in the fact that many employers did not accept passes at the basic level and initially, any grade beneath Grade Two at the General Level was not readily embraced. You were deemed to have passed the exam if you obtained ranges one and two at the Basic Proficiency Level and ranges one to three at the General Proficiency Level (CXC, 2008). Grade Three was only accepted as a pass after 1998, after many stakeholders complained about CXC being

unfair in only promoting ranges 1 and 2 at the General Proficiency level as passes, while GCE accepted grades A, B and C.

The Pro-Registrar confirmed that the negative attitude towards the Basic exams was a problem for the Council. These exams were specially tailored for students who would not be seeking to pursue tertiary studies but rather to enter the working world. Nevertheless, they were viewed as inferior to the General Proficiency examinations. Consequently, the Pro-Registrar reported, “Basic is on its way out.... More students are opting for General; Basic is undersubscribed. Employers are not recognizing or opting for Basic qualifications. The General is more relevant to employers’ needs.” Because the Basic proficiency qualifications had been “losing currency”, and following a “systematic study of acceptance in the region”, the Pro-Registrar reported that the decision was taken to discontinue the Basic Proficiency examinations. Thus, those students who were formerly entered for these examinations now had to sit the General Proficiency examinations, even if they were not operating at the academic level required for them. This policy decision, the result of pressure from stakeholders, negatively impacted the success rate of students because weaker students and those not planning to pursue tertiary studies, who would have passed exams at the Basic Proficiency level, were now denied the chance to be successful.

In addition to employers, from as early as 1988, principals have been complaining about the CXC examinations. In a *Daily Gleaner* article of November 7, 1988, the writer reported difficulties principals say they experienced. Principals expressed their discomfort with the Council’s grading system and their dissatisfaction with the difficulty level of the examinations. One principal asserted that the CXC “...was not serving the role it had originally intended”. He averred that the examination was crafted to cater to the “average student”. This would include those who were not academically brilliant. However, the principals believed that the difficulty level of the exam ensured that some students “did not have a chance” to be successful (p. 10). Thus, in the principals’ eyes, CXC was not achieving its objective of catering to a wider cross section of students, as the view was that the examinations were too difficult for the majority of students. One perceived contributor to students’ failure is the vast amount of content that has to be covered.

The Problem of the Breadth and Depth of the Syllabi

Despite CXC's reports on its successes, each year, many stakeholders in Jamaica - employers, tertiary institution representatives, parents, commentators, teachers and students - continue to lament its limitations. Teachers and students complain about the amount of content that has to be covered for the exams (Bryan, 1990; Mitchell, 1989). The question of the breadth and depth offered by CXC syllabi compared to London and Cambridge exams was posed to the CXC officials. The Syllabus Officer referred to the philosophy and mandate of CXC to emphasize the point that CXC was intended to replace colonial exams and that the exams are "grounded in educational and colonial departure." The former employee of the Council recommended that "a comparison between the respective syllabuses would provide the information required." The Pro Registrar was emphatic in his assertion that,

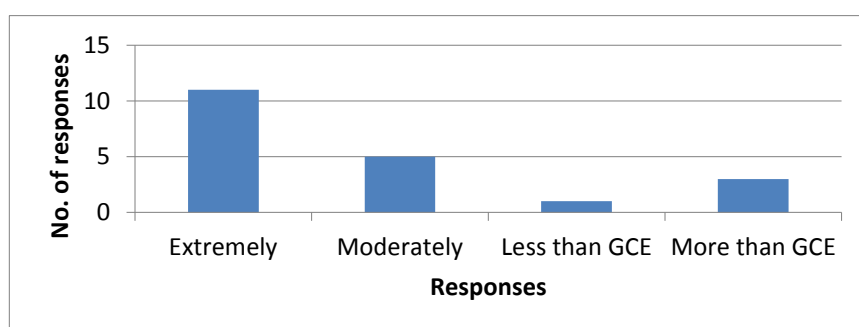
"CXC answer this issue... [the exams are] culturally grounded yet cater to the international market despite the predominantly West Indian content. There is more breadth and depth, hence the criticisms about rigour and challenge. We maintain quality and cover wider areas than traditional exams. The immediate environment and community and the other areas are covered. The other exams were more insular" (C2).

The teachers/markers also agreed that CXC "covers a lot." One conceded that "GCE did offer breadth and depth but because of how the exams were set, one could escape. Now CAPE exams force students to do everything" (CM2). The other CAPE marker shared a similar view: "There is not necessarily more breadth and depth. Both give wide cross-section of knowledge, but delivery and assessment make the difference. SBA facilitates creativity while GCE focuses more on content than activities" (CM1). She was also critical of CXC, noting that in some CAPE subjects "there is too much breadth. For example, Chemistry is equivalent to second year at UWI." For some students, she opined, the "transition [from CSEC to CAPE] is difficult" (CM1). Giles (2011, p. 5) reports that when the Council was mandated to

provide examinations for the region, there were “no structured curriculum at the secondary level in several territories.” Thus, the Council had the onerous job of developing “syllabuses based on non-existent curriculum” (ibid.). Various educators, teachers and select officials across the sixteen territories contributed to the National Committees with responsibility for creating syllabi. These replaced “the list of topics to be covered prior to the examination” that schools were accustomed to receive to assist the preparation for the overseas colonial examination.

The teachers in the survey were asked to judge the extent to which CXC syllabi are useful to help prepare students for their exams. Figure 7: 1 presents the views. The majority confirmed their usefulness. Three teachers thought that they are more useful and one that they are less useful than GCE syllabi.

Figure 7:1 Teachers’ assessment of the usefulness of CXC syllabi

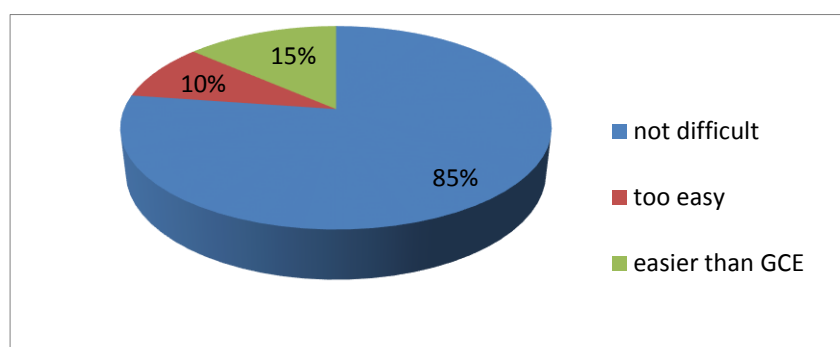


The teachers involved in the survey were also asked to comment on the perceived problem of the breadth and depth of CXC syllabi. The majority (90 percent) thought they were adequate while the others thought they were too extensive. Two of the latter group thought that the CXC syllabi require more than the GCE syllabi. It is interesting to note that one respondent thought that whereas the CSEC version of the subject that he taught was adequate, the CAPE version of the same subject – Technical Drawing – was too extensive. His justification for this was captured in his question: “Why spend so much time preparing SBAs and then sitting such extensive examinations after?”

Despite the view that the syllabi are too extensive, as revealed in Figure 7.2, teachers’ assessment of the level of difficulty of the CXC exams was favourable. None thought they were too difficult or more difficult than GCE exams. In fact, the

majority (17 or 85 percent) said they are not difficult while two (10 percent) said they are too easy and three (15 percent) that they are not easier than GCE exams. Two respondents gave two responses. This indicates, from the teachers' perspective at least, that the complaints are somewhat unfounded and that the Council does in fact present examinations that are manageable for students.

Figure 7.2 Teachers' assessment of the level of difficulty of CXC exams



Being well aware of the other factors that impact performance, the researcher asked the tertiary level representatives³ in the sample about changes that they would suggest to CXC about curricula. One person was undecided (TE3); one said, “CXC is doing well” (TE4), while the others had varied suggestions:

“More outcome-based teaching and assessments; students should be allowed to participate in more practical, real life activities” (TE2).

“The SBA for CAPE is ridiculous in some parts... [assessment is] at the level of master’s programmes in some areas” (TE5).

These comments seem to corroborate the view that the syllabi are too detailed and require the acquisition of more theoretical than practical skills. In this regard, the Council would be deemed as unsuccessful in their preparation of graduates for the working world. However, it can be argued that national curricula and not CXC syllabi

should be held accountable to meet workforce needs. Small states do grapple with examinations and curricula that do not speak to their individual national developmental goals. When no curricula are present to capture national aims and goals, these states will find deficiencies in the examination board's coverage of content and examination.

The Syllabus Officer proffered a divergent view: SBA is “authentic assessment which bridges the gap between school and work.” He also emphasized the fact that the examinations are based on the objectives that are outlined in the syllabuses and the examinations are criterion-referenced. He insists that the guidance provided to teachers and students in the syllabuses provide adequate preparation for the exams. Additionally, he noted that the syllabuses are in keeping with the “international rules of curriculum development” and the diverse assessment tools help to secure students' success. Due to the demands of globalization and the internationalization of education and examinations, it is challenging for the examination body to cater to the diverse needs of the nations. Thus, as Hall (1990) insists, despite a shared history and colonial past, the identity of the various islands in the Caribbean is not homogenous.

Syllabus Examination

Close examination of a few syllabi may help to determine if the material that students have to cover in preparing for CXC examinations is in fact too voluminous. Additionally, an examination of syllabuses can highlight whether or not CXC has successfully carried out this aspect of its mandate to replace the syllabuses provided by external examination boards with ones that are more relevant to the nationalistic, postcolonial and developmental aims of the region. Syllabus analysis can also help to highlight the nature of the syllabuses – whether or not they are student-centered, the nature of the activities that are included and the skills that the students are expected to master upon completion of the courses. Close examination of the nature, attributes, characteristics and content of syllabi can reveal the goals and objectives of the organization that prepares them (Eberly, Newton & Wiggins, 2001). In analyzing syllabuses, we examine whether they cater to the cultural and historical

sensitivity of the nation; the skills and attributes that are engendered for future use in the students; the development of knowledge and the role of the teacher in assessment (Tanner, 1980; Hyman-Anglin, 1992). Since a syllabus is only “part of the curriculum jigsaw” which guides the teaching/learning process, care should be taken in their construction to ensure that there is a link among society’s needs, students’ needs, national goals and aims, theory, and practice (Hyman-Anglin 1992; Madeus & Stufflebeam, 1989; Scarino, Vale, McKay & Clark 1988, p. 1). Syllabuses, and by extension curricula, are expected to foster the intellectual, cultural, religious and physical development of students. Knowledge, skills, attitudes, personal and intellectual qualities that are required in society should be acquired by students (Madeus & Stufflebeam, 1989; Dove, 1980; Munbodh, 1987; Watson, 1984; Hyman-Anglin 1992).

It is not enough that examinations should drive curricular and focus solely on knowledge acquisition to the exclusion of other facets of the students’ development. However, it seems that, “a detailed teaching curriculum designed for the majority of the Jamaican students in upper secondary schools does not currently exist” (Dwyer, Harris & Anderson, 2003, p. 16). The ROSE programme serves as curriculum for grades 7 – 9 but for grades 10 and 11, the CXC seem to be “inadvertently driving the curriculum for all Jamaican students even those who have no intention of ever sitting the CXC or pursuing tertiary education” (ibid. p. 18). It is prudent then, that as recommended by Dwyer, Harris and Anderson (2003, p. 32), the Government “establish a locally developed core curriculum for all Jamaican students” which would be aligned with the CXC syllabuses.

“Syllabi are educational tools that often have more important functions than what commonly is acknowledged by administration” (Eberly, Newton & Wiggins 2001, p. 56). The rules governing syllabus development mandate that since the syllabus will serve as a guide to the teachers and students, it should include details of the content, goals and objectives and suggested activities to achieve them, methods, resources, assessment, and evaluation which the teacher will interpret and use, bearing in mind the students. Scarino, Vale, McKay and Clark (1988, p. 1) suggest that, “The syllabus represents the nexus between theory and practice, where the ideas and principles of [planners] are converted into a statement to guide what is to

happen in the classroom.” As Madson, Melchert and Whipp (2004, p. 549) intimate, although the syllabi do not serve to provide “outcome data regarding the achievement of program goals and objectives, they ... document the learning activities and assessments that comprise a curriculum.” It is with this in mind that the details of chosen syllabi for both CXC and GCE subjects are examined. This examination is primarily descriptive with the aim being to show what is emphasized by each examination board, the usefulness of the syllabi, the breadth of content and the extent to which they serve useful pedagogical and instructional purposes for teachers and students. Additionally, we can assess the extent to which the syllabi facilitate contemporary pedagogical strategies and help students to acquire usable skills.

An analysis of the GCE and CXC syllabuses of the early 2000’s reveals differences in their structure and content. Arguably, all these syllabi have undergone changes since then. In fact, Cambridge no longer offer GCEs but instead offer IGCE and GCSE examinations. It must be noted that Jamaica did not sit GCSEs and IGCSEs but GCE examinations, hence the attention paid to GCE syllabuses. Admittedly, this examination of syllabi is being done without the benefit of subject and assessment specialist knowledge and the conclusions drawn are not meant to be exhaustive and conclusive. Rather, the aim is to show that the syllabi are diverse and offer varying levels of assistance to users.

English Language, English Literature and Mathematics at the CSEC levels are compared with their counterparts at the GCE Ordinary Level. The rationale behind choosing these subjects is that, in most cases when examination results are reviewed in Jamaica, the emphasis is placed on Mathematics and English Language because of the pervading view that these are the essential subjects that form the foundation for learning and help to develop students’ problem solving, analytical and reasoning skills. Additionally, international assessment instruments also focus on these subjects. They are also prerequisites for entry into all tertiary institutions and most employers require recruits to have passed them (National Council, 2005; Thompson, 2003). English Literature has traditionally featured British based texts with little or no attention paid to West Indian writers. It is interesting to observe if the CXC

English B syllabus is limited to only local writers, or if it includes writers from other societies.

Generally, in keeping with student-centered syllabuses, the CXC syllabuses tend to be more detailed and robust than the GCE ones. Thus, they tend to be more helpful to both teacher and students. They present an introduction, aims, rationale, assessment objectives and general objectives. The scheme of assessment including internal and external assessment, structure of the syllabus, organization of content, form of the exam, weighting of examination questions, suggested time-tabling – that is allocation of hours – and distinctions between the basic and general proficiency examinations are highlighted. The GCE O' Level syllabuses cover aims, assessment objectives, assessment and content.

The GCE O' Level **English Literature** syllabus is one and a half pages. Four aims are detailed and five assessment objectives. Among these aims, students are expected to "... explore areas of universal human concern, thus leading to a greater understanding of themselves and others" (p. 8). Two assessment objectives are that students "... should be able to demonstrate first-hand knowledge of the content of literary texts; [and] ... communicate a sensitive and informed personal response to what is read" (p. 8). The syllabus notes that the aims and objectives are inter-related and are not tested in isolation. This suggests that students are required to use their analytical skills to be successful. The assessment details indicate that the examination is one paper, which lasts for 2 hours and 40 minutes. Candidates are required to answer five questions. In Section A the students respond to one context question, which may require them to do one question on either Shakespeare or a major English writer. Three texts are presented for this section. Candidates may be required to explain words and phrases, rewrite passages in modern English and relate the given extract to the work. In Section B, candidates write three essays on at least two other texts. One is text-based and two are essay questions of each text. Eight texts are presented for this section. Thus, students are required to use analytical and synthesis skills as well as simple recall to be successful.

Although the aims speak to exploring areas of universal human concerns that should lead to self-understanding and understanding of others, it is important to note that the writers are mostly European authors. However, since the 1970s, the

examining boards have included West Indian novels on the English Literature syllabus (Mitchell, 1989). Since literature is life and a representation of what exists in the writers' society, this forces us to query the breadth of universal concerns explored, especially in relation to other cultures and peoples. Bogle (1981) cites Williams' comments that in the post-emancipation years, West Indians were required to study the works of European authors to the exclusion of West Indian writers. She maintains that the works "...reflected the lifestyle of an alien culture" (p. 8). Noah and Eckstein also concur; noting that small states have "...been forced or lured into a pernicious copying of the curriculum of the center. Even after the release from colonial rule, the disjunction between what is taught and what is needed locally continues" (1988, p. 168).

This does not augur well for the candidates and perhaps this idea propelled the Jamaican Government to insist that all schools enter their candidates for the CXC exams which are deemed to be more culturally relevant. However, it must be noted that Cambridge did start to set literature exams "...which contained material of particular interest and relevance to the Caribbean" Additionally, in subjects such as History, Geography and Biology, the syllabi "contained material of a distinctly Caribbean flavour" (Bryan 1990, p. 38).

The **English Language** paper that Jamaicans sit is a paper prepared for the Caribbean area and five other regions. One and a half pages provide the details. Three aims are listed: to help students to communicate accurately, appropriately and effectively; to help them to respond appropriately and imaginatively and to foster enjoyment and appreciation of texts in the English Language. A note is made that the aims are for the course of study and **may not** (my emphasis) be translated into assessment objectives for the formal examination. Thus, students and teachers are not what exactly will be tested from among the content.

Table 7.4 Comparison of CXC and GCE English Language and Literature Syllabuses

	GCE EXAMINATION	CXC EXAMINATION
Subject	English Literature	English Language and Literature presented together – integrated approach
Aims	Four	Eight
Objectives	Five	Understanding & Expression Various objectives for each area
Details of Examination	<p>One paper 2 hrs 40 mins Answer 5 questions <i>Section A</i> Shakespeare/ Major English Writer – 3 texts</p> <p><i>Section B</i> 3 essays on at least two other texts from among 8</p>	<p>English Literature Two Papers <i>Paper 1 2 ½ hours</i> 2 sections, 4 questions Answer at least 1 from each section</p> <p><i>Section A</i> 18 texts: Drama, poetry, novels, short stories ; Varied writers: English, American, Caribbean, Diaspora</p> <p><i>Section B</i> 7 themes Compare themes from at least two texts</p> <p><i>Paper 2 Unseen paper</i> 2 Questions – drama, poetry, or prose students choose 1 Test comprehension, writer’s craft</p>
	English Language	English Language
Aims	Three	Eight
Objectives	Twelve	Skills and aptitudes presented: Various objectives for each area
Examination	<p><i>Two papers</i> <i>Paper 1</i> Composition 1 hour 60 marks <i>Paper 2</i> Comprehension & Summary 1 hour 50 marks</p>	<p><i>Two papers</i> <i>Paper 1</i> 1 ½ hour 60 marks Multiple choice 60 items 20 vocabulary and grammar 40 comprehension</p> <p><i>Paper 2</i> 2 hrs 40 mins 4 sections 100 marks Section 1 1 Summary Section 2 2 comprehension Section 3 1 narrative/ descriptive essay Section 4 1 persuasive/ argumentative essay</p>

Twelve assessment objectives are outlined. No details of the grade descriptions are given in the syllabus, but users are directed to Appendix A for the information. Assessment encompasses two compulsory papers: Paper One – Composition for 1hr; this values 60 marks. Candidates are expected to write “A composition on one of a number of alternative subjects” and complete “[a] task based on a situation described in detail, in words or diagrams” (p. 5). Paper Two is 1 hour; this values 50 marks. Candidates do a Comprehension and a Summary. The former is intended to test their understanding of “content and argument” and how well they can “infer information and meanings from it” (p. 5). Mitchell (1989, p. 129) reports that, “Comprehension passages were exclusively British and sometimes too obscure in content for the understanding of the Jamaican child.”

The summary values 25 marks and requires the candidates to produce precise and relevant details. Candidates are rewarded for the overall accuracy of their English, “relevance and organization” of information and their ability to rephrase. Marks are also allocated for the “style and presentation of the answer ...the ability to rephrase the original language in their own words and sentence structures, and the overall accuracy of their written English” (p. 5). Thus, a diverse array of skills and abilities including making inferences, summarizing and comprehending are tested by this examination.

Unlike the GCE syllabi, the **CSEC Language and Literature** syllabuses are presented together; the architects speak to the Language Arts Programme and recommend an integrated approach for the syllabuses. Thus, the same assumptions, aims, skills and aptitude govern English Language (English A) and English Literature (English B). The integrated approach is promoted to effectively teach language as it presents grammatical concepts in context and students are better able to see how language works, instead of learning grammatical rules in isolation. Eight aims are outlined. The skills and aptitudes to be developed are presented under two broad headings: Understanding and Expression. For each area, various objectives or indices are outlined. These include, “The ability to obtain information accurately... [and to] grasp insights from reading literature and demonstrate the ability to deduce reasons and motives for particular spoken and written communications...” (p. 3).

The content stresses integration of all the genres; emphasis is placed on the exposure to literature rather than on the learning of facts about the works and literary history. A suggested reading list provides teachers with options. The presupposition that underlies the programme is that students will get exposure to various aspects of literature for each year. The details presented for the exam make the distinction between the Basic and General Proficiency examinations – skills, difficulty and competence levels.

The content and format of the **English A** exam are also detailed. There are two papers; paper one is multiple choice consisting of 60 items designed to test students' "understanding". Twenty are vocabulary and grammar items and 40 test comprehension. Sixty marks are allocated to this paper which students have one hour and a half to complete. Although some argue against the value of objective type questions, undoubtedly, they force students to be discerning and synthesize skills and abilities from varied areas and domains to be successful.

For Paper Two, students are allowed ten minutes to read through the paper and two and a half hours to complete the exam. The paper is divided into four sections, each valuing twenty-five marks. In section one, students are required to do a summary; section two presents two comprehension pieces; section three requires the candidates to choose one from among narrative/descriptive topics while section four requires them to choose among persuasive or argumentative topics. This paper tests understanding, expression and diverse skills, including comprehension, analysis, and synthesis, which are all seminal to the work place.

Garcia-Bisnott, an educator, points out that the focus of the exam is on students' "...ability to use and understand the language". She maintains that the exam seeks to test not so much what the students know - content - but on how they write what they know – expression. The exam "... tests ability to write simply, to use language correctly, competently,....The paper is heavily biased toward expression. Seventy-five percent of the marks are awarded for this skill" (1996, p. 1D – 2D). The Ministry of Education, Youth and Culture, in their evaluation of students' performance in the 2003 examinations concur noting that, "The CSEC grade profile that always needs strengthening is the student's ability to **use knowledge**, that is, *application of knowledge* and to do in-depth *analysis and interpretation*" (2003, p.

6). Any attempt to improve students' performance in this subject, demands keen attention to these areas. Arguably, these are the skills and abilities that graduates will need to function effectively in a global workforce. This suggests that CXC are in fact fulfilling this aspect of their mandate successfully.

For **English B**, there are also two papers; paper one requires essay type responses. Students have to synthesize knowledge and answer four questions in two and a half hours. There are two sections and they must answer at least one from each section. Section A, presents questions from the eighteen prescribed texts in the various genres: Drama, Novels, Short Stories and Poems. There are varied writers – English, American, Caribbean and Diaspora, thus broadening the scope of the works. In Section B, students are required to discuss themes or characteristics common to more than one work. Seven themes are suggested but teachers are encouraged to explore more than those prescribed. The specific skills tested are similar to those tested in Section A; additionally, candidates must synthesize information from at least two texts and demonstrate an appreciation of the social content and context of literature.

Paper Two is referred to as the unseen paper because students are required to respond to an unprepared piece of literature. The specific skills and aptitude tested include comprehension and awareness of the writer's craft. Students choose one of two pieces. They may be given drama, poetry or prose. A general note to teachers include the approach they may take to teaching, cautions to help prepare students, how to mix and match sections, which skills are required for paper two, and the grounds on which credit is awarded. Undoubtedly, this syllabus is more student-centered and tests more skills than the GCE syllabus. It may be argued that the content is wide, but it is recommended that students start studying the texts from as early as year 9, to familiarize themselves with them and start developing the requisite skills for their culminating examinations.

The Mathematics syllabuses

Details of the key areas of syllabus composition for both examinations are presented in Table 7.5.

Table 7.5 Comparison of CXC and GCE Mathematics Syllabuses

	GCE EXAMINATION	CXC EXAMINATION
Subject	Mathematics	Mathematics
Aims	Four	3 Rationale presented
Objectives	Eleven	Eight; general and specific presented with each topic
Notation	3 ½ pages	3 ¼ pages
Content	39 themes; seven pages	10 ½ pages topics and objectives 37 pages in all
Details of Examination	<p>Two papers Paper 1 Short Answer (80 marks) No calculators, slide rule nor tables Students must show all working.</p> <p>Paper 2 Section A (52 marks) Six compulsory questions</p> <p>Section B (48 marks) Five questions to do four</p>	<p>Two papers Paper 1 Multiple Choice (60 marks) 60 items</p> <p>Paper 2 (90 marks) Section 1 (60 marks) Eight compulsory essay-type/problem-solving questions Electronic calculators can be used. Ten guidelines governing use provided</p> <p>Section 2 (30 marks) Six essay-type/problem-solving Questions; students choose two</p>

The CXC **Mathematics** syllabus is 37 pages. It details the rationale, objectives, organization of the syllabus and format of the exams:

“The guiding principles of the Mathematics syllabus direct that Mathematics as taught in Caribbean schools should be: (i) relevant to the existing and anticipated needs of Caribbean society; (ii) related to the ability and interest of Caribbean students; (iii) aligned to the philosophy of the educational system” (p.1).

Eight objectives, "...with a summary of the considerations which led to [their] adoption" are provided (p.1). These include: "To cultivate the ability to apply mathematical knowledge to the solution of problems which are meaningful to students as citizens To help students develop positive attitudes such as open-mindedness, self-reliance, persistence and a spirit of enquiry" (p 2). This means that the syllabus considers and addresses the application of skills and the relevance of the concepts to the students' real life.

The examinations require candidates to write two papers. Paper one has 60 multiple choice items. Candidates have one and a half hours to complete it. One mark is allotted to each item. A breakdown of the number of items set on each topic is presented so users are fully aware of the composition of the exam.

Details of examinations format are provided; candidates have two hours and forty minutes to complete paper two. They can use electronic, handheld calculators; ten guidelines governing their use are provided. The paper has two sections: Section one comprises eight compulsory essay type or problem-solving questions based on the compulsory core. Ninety (90) marks are allotted for this paper. The number of topics covered, and marks allocated for each are detailed. Section two values thirty marks. Students are presented with six essay type or problem-solving items. They are required to do two; each values 15 marks.

Details of the areas and number of questions and the objectives that are related to each topic are provided. The profile dimensions for the exam are presented: Computation, Comprehension and Reasoning. The procedures used to weight the paper and compute the profile dimensions are detailed. Three and a quarter pages are devoted to symbols used on the exam papers. The formulae that are provided in the exam are also presented. The Content of the course - topics, general and specific objectives - takes up all of 10 ½ pages. This suggests that the syllabus developers ensure that students have no doubt about the areas to be covered, the skills they will need and how their marks are assigned. This knowledge translates into the power to be more successful. Consequently, it can be deduced that the Council has given necessary guidance to facilitate students' success.

The GCE Mathematics Syllabus for exams in 2003 is seven pages long. There is a preliminary half a page with notes on the mathematical tables, electronic

calculators, mathematical instruments, mathematical notation and details about examiners' reports. Three and a half pages of mathematical notation are presented at the end of the booklet, which also contains other syllabuses. A book list, covering one and a half pages is also included. The syllabus prefaces the learning aims and objectives with an introduction which details demands and expectations in the examination. Four learning aims are provided; among them is, "The course should enable students to: acquire and apply skills and knowledge relating to number, measure and space in mathematical situations that they will meet in life" (p. 4). There are eleven assessment objectives which detail the abilities that the exam will test. Among them are candidates' ability to "apply and interpret Mathematics in a variety of situations, including daily life; [and] formulate problems into mathematical terms, select, apply and communicate appropriate techniques of solution and interpret the solutions in terms of the problems" (p. 4). This means that this syllabus takes into consideration the requisite skills and abilities that graduates will need in the workplace and thus would be considered as valuable and appropriate.

Units of measurements for the examination are presented. The "Scheme of Papers" is detailed. The component, time allocation, type, maximum mark and weighting are outlined. The examination consists of two papers; Paper One is a short answer paper; candidates get two hours to complete short answer questions which can earn them a maximum of 80 marks valuing 50 percent of the marks. Students are advised that the paper "...will consist of about 25 short answer questions" (p. 5). Candidates are warned that, "Neither mathematical tables nor slide rules nor calculators will be allowed in this paper" (p. 5). Students are required to show "all working.... Omission of essential working will result in loss of marks". They are advised "to cover the whole syllabus" (p. 5) as questions from any part of the syllabus could be tested on each paper.

Paper two consists of two sections: "Section A (52 marks) will contain about six questions with no choice. Section B (48 marks) will contain *five* questions"; candidates are required to do four. Again, students are cautioned to show "essential working" (p. 5). Details relating to calculating aids are provided. Four points (a) to (d) are detailed about paper 2. This is followed by the detailed syllabus; 39 themes

and the subject content to be covered for each fill the remaining five and a half pages.

Like the CXC Mathematics exam, this exam also comprises two papers; in both cases, paper one prohibits the use of calculators. The use of the word “about” when speaking to the number of items to be presented on each O’ Level paper speaks to uncertainty, unlike the CXC counterpart. The aims and objectives of the GCE paper point to the relevance of the examination for contemporary society and the world of work. These echo the objectives of the CXC syllabus. It seems safe to conclude then that compared to GCE, the CXC syllabuses present more details and offer greater guidance for users. The breadth and depth that the syllabuses cover require students to start preparing for the exam from as early as grade nine in order to amass a wealth of experience and knowledge to be successful.

Notwithstanding the inherent benefits of the syllabuses, relevance of content and assessment strategies designed to facilitate outstanding performance, students continue to perform poorly in CXC examinations. Green-Evans, Education Editor of *The Observer*, speaking about the CXC examinations notes that:

Its syllabuses and tests, with school-based assessments as part of the programme, are reputed to be more relevant to Caribbean students than the exams from the United Kingdom. However, passes in the general proficiency exams, particularly in maths and the sciences, have largely remained weak (2003, p.3).

Of note is the fact that the Cambridge Examinations syndicate has revised its syllabuses and assessment procedures in recent times. The introduction of GCSE in 1988 and Advanced Subsidiary (AS) levels in 2002, offers candidates alternatives to the traditional GCE O’ Level and A’ Level Examinations. In an editorial in the *Daily Gleaner* of June 26, 1986, the writer noted that the British were dispensing with the O’Level exams because they were “...not serving British society or the students.” One writer in *The Education Observer* of October 16, 2001, in an article entitled, “Cambridge competes for market share”, declares, “Recent years has seen the England-based examination body implementing new programmes and changes to its

current ones, as part of a major effort to expand its offers, attract more students and ensure sustained visibility throughout the region” (p. 15). The writer forecast that the strategies would not work in Jamaica as the government “increases the pressure on schools to replace the GCE with the CAPE exam.”

Students’ allegiance to GCE examinations

Notwithstanding the government’s efforts to get students to sit CXC examinations, another problem that impacts CXC success is that some candidates still sit GCE examinations, for various reasons. Bray (1998) suggests that the main reason for this is the international recognition which the metropolitan exams enjoy. This view is also embraced by Thompson, who affirms that “... it is well known that ... A’Level enjoys international recognition [and have] ...international status” (1996, pp. 7 – 8). However, GCE examinations are more costly but many students, especially those pursuing continuing education who were previously exposed to GCE in school, do GCE exams because of the familiarity they offer, and they can readily find a well-established private centre that will accommodate them. Some individuals were reluctant to make the switch to CXC because employers in some quarters were initially refusing the certification regarding it as inferior to GCE. This privileging of the colonial exam stems from the fact that the entrenched ideology of the superiority of the colonial center continues to dominate the minds of students and employers who aver that the qualifications from the metropole are superior to those that are offered by the Caribbean Examination Council. Despite those who still pursue GCE examinations, most students in government high schools sit the examinations offered by CXC.

One trend observed from the examination data in the years immediately following the introduction of CXC, corroborated by Table 7.6, is that as the number of entries to CXC examinations increased, the numbers that entered for London and Cambridge O and A levels decreased.

Table 7.6 Entries to CXC and GCE Examinations 1984 - 1987

Examining Bodies	Number of candidates			
	1984	1985	1986	1987
CXC Basic and General	18,828	17,581	16,153	17,414
London GCE O and A Levels	8,881	7,909	5,417	7,990
Cambridge GCE O and A Levels	18,918	18,471	15,617	15,376

Source: Overseas Examinations Office 1988

A look at data (in Table 7.7) for select subjects over the decades of the thirty years after CSEC's introduction confirms the trend. In its introductory year, the numbers sitting CXC exams were modest, if not minimal. From an age cohort of 26,453 students, the majority, a little over 3,000 were sitting English at the General and Basic levels, while a little over 8,000 were sitting the subject at GCE. A little less than 2,000 students were sitting Maths at CXC while almost 6,000 were writing the exams with GCE. A decade later, the numbers sitting CSEC English and Maths exams had skyrocketed to almost 15,000 while those sitting GCE Maths was almost 3,000 and only 5,747 were sitting English. By 1999, more than 17,000 sat CXC English and a little more than 16,000 sat Maths, while the numbers writing GCE exams had plummeted to almost 2,000 and 10,000 respectively. A noticeable decrease in the success rate of students sitting GCE exams is also evidenced through the figures; while, with the exception of Mathematics and English, which seemed to be consistent, performance improved in the CXC subjects under consideration.

Table 7.7 Success rate of students in select CXC and GCE exams for 1979, 1989 and 1999

Subjects	1979		GCE	1989		GCE	1999	
	CXC Gen	Basic		CXC Gen	Basic		CXC Gen	GCE
Caribbean History	61.6 (453)	52.7 (330)	57.0 (4,551)	48.8 (4,103)	54.8 (257)	42.4 (1,240)	72.6 (4,752)	31.5 (1,510)
English A	39.1 (1,064)	31.8 (2,009)	41.1 (8,024)	27.3 (13,354)	50.7 (1,656)	34.5 (5,747)	41.2 (17,318)	36.4 (10,052)
Geography	57.0 (214)	47.6 (223)	39.0 (2,831)			26.0 (281)	67.7 (3,430)	22.7 (198)
Maths	26.8 (592)	4.0 (1,430)	B 31.0 C 35.5 (5,081) (769)	22.7 (11,056)	30.9 (3,622)	6.5 (2,465)	26.8 (16,038)	0 (96) 2.2 (1,204)

Sources: Overseas Examination Office, CXC Reports

Figures indicate percentage passes for CXC grades 1 and 2; GCE grades A - C; numbers in brackets () are the numbers writing the exams.

Attitudes towards the Advanced Level - CAPE - versus GCE A'Levels

The CXC's replacements for the GCE Advanced level examinations, CAPE, were introduced in 1998 in a few subjects as a pilot exercise. Table 7.8 shows the number of students from Jamaica who were entered for and were successful in these exams, along with those for the ensuing year. The table also details the candidates who entered and were successful in the GCE A' Level exams in the year preceding the introduction of CAPE, the initial year 1998, and the ensuing year.

Traditionally, not many students pursued advanced level studies. Only the very best from traditional high schools went to sixth form to prepare for university. In 1997, except for General Paper, which all students would do, the numbers are really small and the percentage passing, except for English which experienced a 58.7 percent success and General Paper which enjoyed 95.3 percent, the pass rate was way below 50 percent. In the ensuing year, there was a substantial increase in the numbers entering for the exam; all but one subject – Sociology – enjoyed a success rate over 50 percent.

Table 7.8 CAPE and GCE A Level results in selected subjects 1997 – 1999

Subjects	GCE A Level 1997	GCE A Level 1998	CAPE 1998	GCE A Level 1999	CAPE 1999
English # sitting # pass percent pass	75 44 58.7	610 476 78.0	Not offered	661 623 94.25	18 17 95
History # sitting # pass percent pass	177 70 39.5	788 497 63.0	Unit 1 18	760 463 60.92	Unit 1 73 70 96 Unit 2 14 12 87
Sociology # sitting # pass percent pass	145 51 35.2	888 436 49.0	Not offered	979 611 62.41	Not offered
Gen Paper /Comm Studies # sitting # pass percent pass	1,407 1,341 95.3	2,431 2,197 90.37	137	No grades available	300 273 91

Source: Overseas Examination Office

Comm Studies: CAPE candidates sit Communication Studies

Gen Paper: GCE candidates sit General Paper

Unit 1 is done in lower 6th form – year 12

Unit 2 is done in upper 6th form – year 13

In its initial year, few subjects were offered at the CAPE level and not many students entered for them. This was also true in the ensuing year. Despite the small numbers, over 80 percent of those who sat the exams were successful. A fairly consistent number entered for all the GCE subjects. Students entering for History and Sociology attained 61 and 62 percent pass rates while those who sat English attained over 90 percent success.

The scope of this thesis does not allow for a detailed examination of all subjects in all the years since the CAPE examinations have been offered. However, the decision was taken to examine the performance in Literatures in English, Sociology, History and Communication Studies for the first decade, since these represent the subjects that historically had more students sitting them and could give a better picture of the cohorts as all students are required to sit Communication

Studies. It must be noted, though, that various factors impacted the numbers of students doing CAPE examinations. In the first instance, because the government had upgraded the new secondary schools to high schools, it meant there were more students sitting and passing examinations at grade eleven. Consequently, there were more students available to sit GCE A' Levels and CAPE examinations.

Secondly, many secondary schools, including some of the upgraded ones, that formerly ended the secondary education at grade 11, extended their programmes to grade 13 and began to offer CAPE examinations. It can be inferred that the schools and their stakeholders became aware of the value of continuing education and thus embraced the opportunity to prepare more students for university in keeping with the international trend to be more prepared for the global workplace. Thus, the numbers increased considerably and concomitantly the success rates. These contributing factors were outside the scope of the Council, which might seem to have been successful though not from policies or practices that they orchestrated.

Additionally, many schools stopped offering GCE A' Levels when the CXC started offering CAPE. Thus, the data will show considerably more students entered for CAPE than for A' Levels. In many cases, only private institutions offered GCE examinations. It would therefore be inaccurate, when examining the data in Tables 7.9 and 7.10 to conclude that CXC was more successful than GCE in the advanced level subjects as these factors identified would have impacted the results considerably. Thus, the success enjoyed by the Council was facilitated by government policies that had not been implemented when the majority of schools sat only GCE examinations.

Table 7.9 Jamaican Students' performance in CAPE and GCE examinations in selected subjects 2000 – 2004

Subjects	2000	2001	2002	2003	2004
Lits in English					
Unit 1					
Unit 2	(42) 91% *(14) 93 %	(139) 82 % (116) 96 %	(620) 86.5 % (145) 89.70 %	(625) 79 % (509) 93.9 %	(754) 93 % (535) 97 %
GCE AS				(67) 88.06% (202) 91.58%	A2 (169) 93.17% (221) 90.09%
A Level	** (59) 22.2 %	(645) 81.4 %	(480) 80.4 %		
Sociology					
Unit 1	Not offered	Not offered	(785) 93.79 %	(1,022) 84.7%	(1,296) 85%
Unit 2			(739) 91.9 %	(647) 94.1%	(821) 93 %
GCE	(1,124) 48.38 %	(1,002) 47.6%	AS (117) 68.31% AL (242) 44.43%	(223) 53.36 % (706) 47.59 %	A2(405) 69.44 % AL (581) 38.21 %
History					
Unit 1	(124) 89%	(364) 91%	(614) 95.43%	(755) 94.1%	(791) 88 %
Unit 2	(60) 94%	(103) 86%	(354) 95.65%	(554) 98.8%	(652) 90 %
GCE AS				(134) 70.15% (302) 61.26%	A2(165)85.71% (251) 57.77 %
A Level	(780) 68.10%	(641) 71.6 %	(533) 61.9 %		
Comm. Studies	(261) 95%	(847) 95%	(1846) 99.35%	(2,711) 97.2%	(3,300) 92.88%
GCE General Paper	No grades Available	(2,580) 92.48%	(2,117) 77%	(1,401) 78.59%	(911) 78.77%

Sources: Overseas Examination Board; CXC Reports

() Numbers in brackets indicate the number of students entered for the exams. Note that in many instances, not all those who entered for the exams sat them.

* Unit 2 was piloted in 2000

** 23 students were absent

It is important to note that the format for reporting the examinations changed from year to year. For GCE examinations Grades A to E are accepted as passes. However, if students did not perform satisfactorily, they could be awarded O'Level grades "a" to "e". Failure to achieve the latter grades meant they were awarded "u". When GCE decided to offer their exams in a modular format like CXC was doing, students could sit examinations at the end of their 12th year. These were designated as AS or Advanced Subsidiary exams. Those exams sat at Grade 13, were given the Advanced Level title. The General Paper is considered as an AS Level subject. Formerly, it was considered to be an A/O Level subject.

Table 7.10 Jamaican Students' performance in CAPE and GCE A' Level examinations in selected subjects 2005 – 2008

Subjects	2005		2006		2007		2008	
Lits in English								
Unit 1	(576)	92%	(942)	89.77%	(846)	92.56%	(1,075)	92.86%
Unit 2	(570)	95%	(493)	94.43%	(790)	93.95	(812)	95.64%
GCE A – e12	(204)	92.6%	(141)	92.2%	(68)	95.6%	(19)	94.7%
Sociology								
Unit 1	(1,069)	96.42%	(1,937)	75.25%	(2,051)	95.41%	(2,422)	91.62
Unit 2	(1,086)	99.23%	(941)	91.29%	(1,526)		(1,762)	96.62%
GCE A – e12	(514)	60.3%	(370)	61.1%	(255)	44.3%	(31)	29%
History								
Unit 1	(613)	86%	(880)	92.85%	(988)	90.76%	(1,173)	85.58%
Unit 2	(704)	87%	(516)	89.07%	(778)		(953)	88.80%
GCE A - e12	(237)	77.2%	(125)	71.2%	(77)	58.4%	(13)	84.6%
Comm. Studies	(2,817)	98 %	(4,366)	98.93%	(4,762)	98.41%	(5,148)	96.93%
GCE General Paper a – e	(737)	62.4%	(358)	73.5%	(83)	67.5 %	(12)	91.6 %

Sources: Overseas Examination Board; CXC Reports

() Numbers in brackets indicate the students entered for the exams. Note *that* in many instances, not all those who entered for the exams sat them.

Table 7.11 presents the results for selected CAPE subjects in 2009 and 2011. The Overseas Examinations Office could not produce the figures for Jamaica for 2010 nor the GCE Advanced Level results for the targeted years. Students continued to perform admirably in the CAPE examinations. For each of the subjects presented, more than 50 percent of the students are successful. In fact, the performance rate is in the 90s, in keeping with the trend in the previous five years. Regrettably, no comparison can be made with the GCE A'Level results as the data were unavailable. Based on the data, the performance of students in the CAPE examinations is better than that in the CSEC examinations. Whereas it is safe to say that CXC has successfully achieved its mandate for the provision of advanced level examinations, Jamaican students are still performing poorly in key subject areas at the CSEC level.

Table 7. 11 Jamaican Students' performance in CAPE examinations in selected subjects 2009 and 2011

Subjects	2009	2011
Lits in English		
Unit 1	(801) 90.0	(1,126) 94.9
Unit 2	(799) 95.8	(757) 92.4
Sociology		
Unit 1	(2321) 85.7	(2,904) 86.9
Unit 2	(1785) 98.4	(1,862) 96.7
History		
Unit 1	(1,030) 89.9	(1,013) 80.1
Unit 2	(909) 90.8	(710) 90.1
Comm. Studies	(4,066) 98.3	(6,644) 93.1

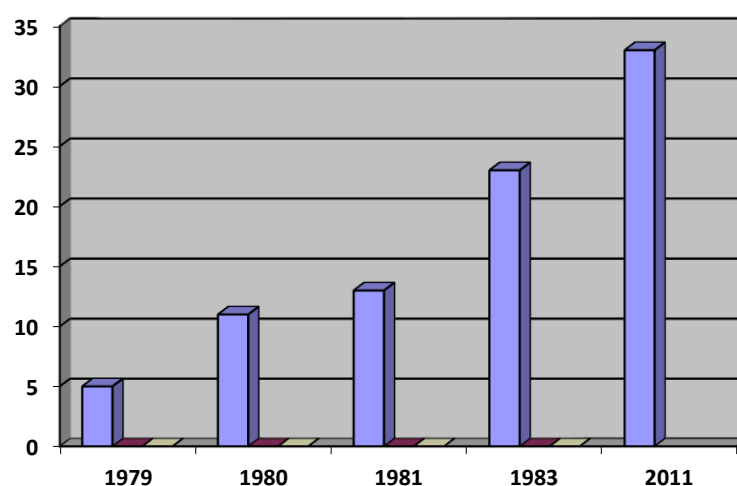
Source: Overseas Examinations Office

() Numbers in brackets indicate the students who sat the exams.

Criticisms about the range of subjects

Another problem or pressure exerted on the Council that impacted their success was the criticism that emanated from the stakeholders about the range of subjects. As a fledgling examination Board, the CXC started out offering only a few subjects. This sparked criticism from the stakeholders; however, as revealed in Figure 7.3, over the years, they have added many subjects at both the secondary and tertiary levels. In 2015, there were 34 subjects at the CAPE level with five new subjects introduced and 33 at the CSEC level. Nevertheless, as with other small examination boards, the practical cost implications of expanding have to be balanced against their need to facilitate small pockets of students on a few islands, who may want to sit particular subjects. Large examination boards such as Cambridge and London could afford to do this and even tailor courses for specific jurisdictions as they did for Singapore, Mauritius and Malta because the cost could be recovered from other examinations (Sultana, 1999; Bray & Steward, 1998; Bray, 1998).

Figure 7.3 Growth in CSEC subject offerings



Educators' comments on the range of subjects offered by CXC indicate that "CXC has a good coverage of the secondary curricula" and offers "all of the courses needed." However, one of the university representatives suggested that despite the range being "satisfactory", there is room for improvement and the Council "might want to add subjects... in preparation for career choices" (TE1). As explored in Chapter Three, CXC has started to introduce new subjects that are geared at catering to contemporary occupations in digital media, green technology, sports, theatre and the performing arts.

Tertiary Institutions and International Acceptance of CXC qualifications

Despite the emphasis on rewriting the narrative and repositioning themselves in their own education system, small states are always preoccupied with ensuring that their graduates can secure higher educational opportunities and employment in the global village (Fergus, 1987; Bray, 1990; Young, 1998; Bray and Steward, 1998; Claasen, 1999; Pretorius, 1999; Little, 2000; Jules, 2010; Giles, 2011). Initially, Jamaicans shared these concerns and did not hesitate to voice them. The Council worked hard at gaining acceptance for its qualifications and entered into articulation agreements with local, regional and international tertiary institutions to allay the fears of the sceptics and reassure stakeholders of the high esteem in which

the qualifications were viewed by other examination boards and reputable tertiary institutions (*The Caribbean Examiner*, September, 2008; British Council, 2007).

All six government officials opposed the view that CXC examinations and/or qualifications do not adequately prepare students for further education locally or internationally. Their views are summarized below:

- “Not true” (ME3).
- “Not true locally; internationally, not sure” (ME1).
- “Absurd! Students with CXC passes perform exceptionally well all over the world” (ME5).
- “Absolute nonsense; there are many international universities which accept passes in that exam” (ME6).
- “CXC exams are effective as any other for further education locally and internationally. An increasing number of persons are accessing further education and the performance level at tertiary [institutions] continue to improve. Evidence is the recent record numbering first class honours from the UWI, Mona” (ME4).
- “Totally disagree, it is really incorrect. My own children have gone all over the world – Thailand, Japan, Europe, Asia, New Zealand. CXC students are all over. Some US citizens even send their children here to be educated” (ME2).

The CXC representatives also affirmed the value of the qualification and defended the international appeal of the students’ certification. In their comparison of CXC with metropolitan exams, one marker stated that CAPE was “more culturally specific than GCE and offers continuity from CSEC. [Due to the] SBA component, CAPE allows for more creativity, self-expression and personalized work” (CM1). Another marker saw GCE as “more global” and focused on “skill acquisition” whereas CXC [has] more balanced coverage and assesses specific learning outcomes and attends to details” (CM2). The CXC executives readily attested to the strength of their exams compared with GCE. One opined:

“We have developed a model that Cambridge is using for SBA; teachers are involved in the assessment process ... assessment is from various sources....

We compare favourably and others are modelling the CXC approach. We have not only caught up with them but are ahead. Quality has not suffered. In fact, criticisms are ‘we are too rigorous’ and students say the exams are very challenging” (C2).

The syllabus officer spoke to the fact that whereas GCE offers:

“...course outlines with lists of topics, CXC offers curriculum document with teaching strategies. ... Additionally, CXC is a criterion-referenced examination versus GCE’s norm-referenced model. Objectives are linked to examinations. More advice and direction are offered to teachers and students...holistic range of items on exams cover the entire syllabus” (C1).

The former employee referred to CXC’s initial mandate to facilitate her favourable comparison: “The Council was directed to develop school leaving exams to replace GCE O’Level. Comparability with the standards of the British exams was assured by the use of British O’Level Chief examiners as CXC external moderators during the first decade” (C3).

The CXC representatives were asked to compare the curricula to the international scene. The former registrar intimated that “CXC examinations are accepted worldwide as the equivalent to the British GCE O’Level examinations” (C3). The Pro-Registrar affirmed that CXC curricula “compare very favourably. CXC do curricula scrutiny and look at those elsewhere to see that our own are no lower in standard but at or above the standard of others” (C2). The reason for this, he explained, was to facilitate “mobility of students to other international systems [and to] help to prepare students for transition” (C2). The Syllabus Officer concurred, highlighted the focus and nature of CXC curricula compared with others:

“The basic difference is the guidance provided to teachers and students. [They are]... self-contained and include almost everything. The syllabi are criterion-referenced and the focus is on objectives, outcomes and assessment” (C1).

This information corroborates the views expressed in the syllabus analysis section that suggest that the syllabuses are superior to the GCE ones. These views confirm that the Council is generally on par with international standards and articulation agreements with examination boards and universities in the USA, Canada, India and the United Kingdom attest to the international currency of the qualifications. Notwithstanding these strengths, the Syllabus Officer candidly referred to their “only weakness...CXC is behind in the jargon of curriculum development and assessment” (C1). This they will have to address to be on par with the international scene. The analysis and comparison of select syllabi previously done, can serve to clarify and confirm these views.

Another facet of comparison is the ability of CXC graduates to adjust at the tertiary level. When asked if CXC graduates can readily adjust to requirements of tertiary institutions locally and internationally, the reactions were diverse. One CSEC marker said, “No.” However, she pointed out that, “It is not syllabus that is at fault, but the instructions given” (CM3). The other two markers confirmed that, “With CAPE they more readily adjust (CM2)” as CAPE is equivalent to first year in tertiary institutions. Thus, one of the CAPE markers recommended that CAPE teachers “must be careful to help develop writing skills” (CM2) to help prepare students for the tertiary level. These criticisms of teacher methodology and problems in the teaching and learning environment are also alluded to in the subject reports that CXC publishes for each subject annually. Attention is given to teachers’ and students’ weaknesses and advice proffered for improvements. Thus, systemic weaknesses in the national education offerings that are hinged on the colonial legacy, infrastructure, methodology, pedagogy and students’ abilities all mitigate CXC’s success.

Despite the criticisms of the public, among the CXC executives, there was consensus that students adjust readily to the tertiary level:

“Even without CAPE, CSEC students did remarkably well. With CAPE, they can [make the adjustment] ... without fear of contradiction, students perform better in content, skills, attitudes, values, attributes. We keep close tabs on exams ...review, amend, revise syllabuses based on results” (C1).

The Pro-Registrar's affirmation, "Undoubtedly" was extended by other comments: "Students are sought after; they get scholarships for US universities; this is testimony that we do well." Nevertheless, he acknowledges their limitations noting that "some students do not do well." However, he divested the blame for this from CXC to governments who "do not provide enough resources for them to do so" (C2). (Manning, 2007; Francis, 2006; Thompson, 2004; Minott, 2003; Carlson & Quello, 2002 also concur). This also seems to be justified by government's initiatives, detailed above, to improve students' performance. This suggests then, that the other factors that play major roles in the delivery of the content, impact the students' performance, despite the Council's best efforts: teachers, resources and materials, socio-economic status, educational attainment and limited support of parents, and infrastructure all inhibit successful performance of students (Reid, 2010, 2011a, 2011b).

The representatives of the tertiary institutions also spoke to the portability of skills and qualifications of CXC graduates. When CXC recruits are compared with those who had GCE qualifications, one university representative noted that "they are really no different" (TE1). One was unable to make a comparison as there was "no basis for judgment" (TE3). One had no response (TE5). Despite the absence of empirical data, one university representative indicated that "individuals speak from personal preference and approximately 40 percent feel that GCE candidates were better prepared; 40 percent feel CXC candidates were better prepared and show more depth and 20 percent could not decide" (TE4). One marker highlighted the fact that students who sat the GCE exams experienced "gaps in preparation and exams." Due to lack of SBAs for A'Levels, "...students performed well but not in exams. [Thus] ... students pass but there are gaps in their learning when they go to university" (CM2). All the institutions in the sample recruit students with both CXC and GCE qualifications. Some have students who had done terminal secondary examinations with both the CXC and GCE examination boards.

University recruits are usually required to have successfully completed advanced post 16 studies. Traditionally, GCE A'Level examinations were done in sixth forms in Jamaica. The CXC's CAPE replaced GCE A'Levels. Three of the tertiary

institutions' representatives did not comment on CAPE's effectiveness as either "there is no data on [it]" (TE1) or there was "insufficient evidence" (TE3) or "I have not examined fully this examination, so I have no views" (TE2). One of the university educators revealed that 80 percent of the students "entering have 5 or more subjects" as an indication that "students are performing well" (TE4). Additionally, the community college was able to report that "students do very well" (TE5) compared with others across the island. See Table 7.12 that presents students' success rate in selected subjects. There were no data (ND) available for Unit 2 of some subjects as those were not yet done. This institution was able to evaluate students as they offer CAPE certification and these students feed into their associate degree programmes and the first-year programmes that they offer for some universities.

Table 7.12 Community college students' success rate in percentage in selected CAPE subjects for 2004

Subjects	Unit 1	Unit 2
Sociology	100	ND
Spanish	91	100
Lit	100	100
Management of Business	83	96
Math	68	96
History	86	98
Physics	79	100
Geography	100	ND
Economics	100	94
Communication Studies	98	ND
Chemistry	71	ND

However, in other quarters, the performance of students is poor and, generally, many complete secondary education without passing even one subject (Thompson, 2003, 2004; Manning, 2007; Francis, 2006; Minott, 2003). The government is aware of this and each year, new policies are implemented, and new strategies introduced to improve students' overall performance. It must be highlighted that there were limited opportunities for students to pursue post-secondary education in the western region. Thus, most of those who wished to do further studies used to do so at the community college. In many cases then, they get the students who were most successful in the CSEC exams, hence their outstanding success rate in the CAPE examinations.

Three tertiary institution respondents could not comment on the students' ability to make the transition from secondary to tertiary level as there were no "empirical data" (TE4) available hence their inability to "make judgement" (TE3). One noted that there was "no significant difference" (TE1) between students with GCE O'Level and CSEC qualifications. However, another opined that the transfer to tertiary education was "better" for students having CAPE certification than for those with CSEC qualifications as CAPE "bridges the gap" between secondary and tertiary studies (TE5).

The extent to which CSEC and CAPE curricula are relevant to tertiary studies was confirmed by four of the educators while one noted that CAPE qualifications are "not required for nursing" (TE3). The community college representative reported that the "content is relevant [and] helps students to bridge the gap" (TE5) between secondary and tertiary studies. One university representative said, "The content is relevant given the nature of the subject matter in the specializations" (TE1). The other affirmed, "The CXC and CAPE subjects are relevant for tertiary preparation" (TE4). The VTDI representative presented a global view: "They are relevant in that CSEC and CAPE are the foundations on which sound tertiary education is built. Education makes you trainable and training makes you employable" (TE2). Thus, we can affirm, based on the perceptions of the sample that the students who pursue CXC qualifications, especially those who do CAPE subjects, are readily able to adjust to tertiary level studies. In this regard then, CXC is successful, though bolstered by other systemic factors that impact positively on students' performance.

Another area of comparison between GCE and CXC graduates is the level to which students acquire adequate and appropriate knowledge, skills and attitudes that equip them for working in the global economy. When asked to compare the knowledge, skills and attitudes of CXC graduates with their GCE counterparts, one tertiary level educator said she was “not aware of this at all” (TE1). Another said it was “not studied” (TE3). The others’ views were varied and insightful: “There does not seem to be any significant difference between the two sets of students” (TE4). CXC graduates are “not superior but CXC equips students to relate to experiences in the Caribbean and wider world while GCE etcetera confine students to British culture more so” (TE2). While pointing out that she did not think that the accomplishments of the CXC graduates were superior, the other educator noted: “Some pass CXC but don’t understand content; [some achieve] grade 3 but can’t do anything ... they put in less than GCE [and are] very immature... the exam might be easier” than GCE (TE5). Thus, despite the view of some stakeholders that the exams are more difficult, and that the syllabi require more work, there is also the perception that the examinations are too easy compared with their predecessors, as many more students pursuing CXC examinations achieve top grades.

The educators indicated that “the large majority” of their intake – 80 percent, 98 - 100 percent - has CXC qualifications. Although some students have a mixture of CXC, GCE and SSC, “given that most schools enter students for CXC,” most “freshmen enter with CXC and CAPE” (TE1) qualifications, one respondent said. The students’ success rate, though not studied by one tertiary institution representative, was reported by the others as being “generally high”. Students completing the initial phase of the university course at the community college all went on to the university “with B+ or higher average.” For another institution, “The students are performing well. Approximately 80 percent clear final year” (TE1). For another, “Approximately 78 percent will complete [their] prescribed course in the time specified.” This respondent was quick to clarify noting that, “...other factors influence completion for example migration and finance” (TE4).

Whereas two respondents could not speak to whether or not there was a correlation between tertiary level entry qualifications and students’ results because of unavailable data, the others could: “Better CXC grades, better performance.”

“Those with A ‘Levels perform much better. CXC/ GCE O’Level entrants do not perform as well” (TE4). One institution had done correlation with Math and English grades to “predict performance in Pre-calculus Math and Fundamentals of Communication (Foundation Courses). Students with highest CSEC passes tend to perform at high level in the foundation courses” (TE1). Generally, then, it seems the criticisms about the CXC students’ knowledge, skills and attitude acquisition and their ability to function at the tertiary level are imbalanced as the tertiary level representatives highlighted the students’ preparedness and ability to perform well at that level. Consequently, I suggest that CXC has been successful in carrying out this facet of its mandate.

Graduates’ preparedness for the working world

Another prevailing problem that CXC faces is criticism that successful graduates are merely theoreticians who are unable to function in the workplace (Lindsay 2004; Dwyer, Harris and Anderson 2003; Manning 2007). One of the mandates of the Council was to provide citizens who could function adequately and assist with nation building (Bailey 1996; Mitchell, 1989, Griffith 1999). The extent to which graduates are prepared to relate their secondary education to society’s needs was questioned among the sample groups. Whereas one representative at the university level opined that, “They can relate their secondary education to the needs of society since schools’ curricula are aligned to the requirements for entry level jobs,” (TE1) the others offered a negative perspective. They indicated that:

- “Transfer of knowledge is a concern” (TE4).
- “School leavers just do not have the ability to effectively transfer learning. They have to be taught self-direction” (TE2).
- “Many students are unsure of what they want to do at secondary school. Later at tertiary level they find they don’t have the requisite subjects for what they really want to do. They have irrelevant subjects” (TE5).

This suggests that the Council has failed in this regard. However, it can be argued that students do not receive the necessary guidance and are sometimes ill-prepared for the examinations. Thus parents, teachers and the government should take responsibility for this and find ways to incorporate the necessary skills into the curriculum, instead of having students focus solely on the CXC syllabuses during their terminal years (Reid, 2011; Cooke, 2009; Espeut, 2010).

The teachers' perception regarding graduates' readiness to become part of the labour force was also secured. Section C of the teachers' questionnaire asked them to assess the impact of the examinations on students. Using a 5-point scale, they were asked to indicate their feelings to given statements where one indicated strong agreement and 5 indicated strong disagreement. The first three statements, responses to which are presented on Table 7.13, referred to students' preparation for the working world.

Table 7.13 Teachers' assessment of the impact of CXC examinations on students

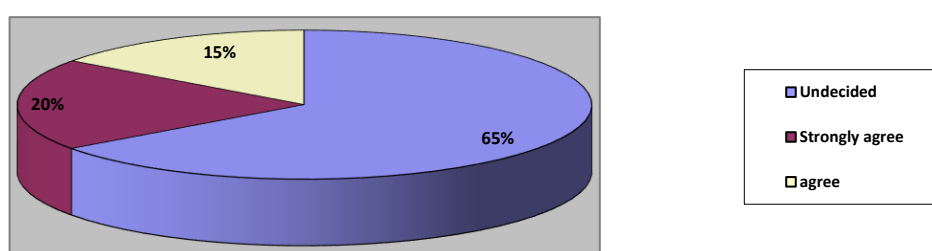
Areas of students' development	Number of teachers responding using the scale				
Response scale 1 = strong agreement 5 = strong disagreement	1	2	3	4	5
Critical thinking	5	10	4	1	0
Practical training in subject areas	3	7	6	2	2
Relevant skills for workplace	4	7	8	1	0

Generally, teachers agreed that CSEC and CAPE syllabi, and by extension the content covered in courses in preparation for examinations, encourage critical thinking, provide practical training and help students acquire relevant skills for the working world. Only as it concerns practical training did two teachers indicate strong disagreement with the statement. So, from their perspective, having delivered the

content and assisted in the evaluation and or assessment of the content through SBAs, the teachers generally affirm that through CXC syllabi and examinations students are provided with opportunities to amass relevant skills that they will need in the workplace.

Teachers in the survey were also asked to indicate whether or not students can function effectively in the global economy upon completion of CXC courses. Interestingly, as depicted in Figure 7.4, although no one showed strong disagreement, the bulk of the teachers, 13 (65%) were undecided about the students' ability to function globally. The remaining 7 (35%) saw 4 (20%) in strong agreement and 3 (10%) in agreement. This indicates that in the teachers' estimation, the students may not be able to function effectively in the global economy after the completion of their studies, since most were undecided and those in agreement were in the minority. One wonders if they are aware of the skills and competencies that the global marketplace requires. If one were to compare these results with the views they expressed about the skills that students acquire, the discrepancy would become obvious as the skills identified are among those that are required by global organizations.

Figure 7.4 Teachers' views about students' ability to function effectively in the global economy



Since the employers are the ones who interface with the graduates upon acquiring jobs, their views were solicited (E).⁴ When asked to speak about the calibre of employees that they have had since the country embraced CXC exams whole scale, two employers said that they have had mostly CXC recruits, but they

could not make a comparison between GCE and CXC graduates (E2 and E5). One noted that a “mixed calibre of recruits” is employed (E3). Another’s assessment was that the employees had “improved since CXC.” She noted that their “level of understanding of the working world has also improved their impact on tasks assigned” (E4). Despite her positive outlook, the job placement manager had an opposite experience. Although she was unable to differentiate between CXC and GCE qualified graduates, she found that it was “challenging to get good high school candidates with relevant credentials that can pass basic screening tests, apply common sense and have acceptable work ethics” (E5). This negative view is held by other employers who bemoan the inadequacies of the graduates who, though successful in the examinations, are ill-prepared for the working world. This then is a weakness, not necessarily with the Council which has the responsibility to prepare syllabuses, examinations and certification, but with the teaching and learning environment which prepares students with the content but does not facilitate their translation of the knowledge to the real world environment. Additionally, when we think of ethics and attitude, we can interrogate the role that society plays in inculcating positive values and attitudes which are necessary not just to ensure economic success but also success in achieving national developmental goals.

Despite these views, the managers generally agreed that the CXC qualified students are better equipped to deal with the requirements of the job. One remarked: “To a certain extent some recruits with CXC qualifications carry a greater degree of efficiency to the job” (E3). The job placement manager agreed that “in theory” they are better equipped but she was unable to evaluate them as workers since she did not directly employ them. The manager of the government’s collectorate did not think that the graduates were “better equipped to deal with job requirements.” In her view, it was “their approach and understanding of the task [that] make a difference” (E5).

When asked to comment on whether or not CXC graduates are more equipped with immediately usable skills that the job necessitates than GCE graduates, one said they are “not more equipped than the job necessitates. If they are more exposed to hands on job training, they will do better” (E4). Another could

not comment (E5) but the majority of the interviewees agreed that they are equipped:

- “Many are equipped with skills especially Information Technology and Communication. They learn many things on the job, then they draw on theory” (E2).
- “They are conversant with the subjects passed making them more equipped to use their skills” (E1).
- “CXC graduates with Information Technology experience are in some cases quicker to grasp some skills which make them easier to train” (E3).

Griffith (2011), in his critique of the performance of Jamaican students maintains that over 80 percent of the students are performing well. His presentation of the success story is captured in Table 7.14.

Table 7.14 Jamaican students’ performance in selected work-related subjects

Subjects	Number writing exam	Candidates obtaining Grades I to III	
		Number	Percentage
Agricultural Science (Single Award)	2125	1886	89
Agricultural Science (Double Award)	355	325	92
Building Technology (Construction)	693	570	82
Building Technology (Woods)	815	561	69
Clothing and Textiles	1426	1156	81
Electrical and Electronic Technology	1976	947	48
Electronic Document Preparation and Management	3329	2983	90
Food and Nutrition	4737	4148	88
Home Economics: Management	3425	2954	86
Information Technology – General Proficiency	308	260	85
Information Technology – Technical Proficiency	13086	11312	86
Mechanical Engineering Technology	1011	607	60
Office Administration	7145	6048	85
Physical Education and Sports	1431	1372	96
Theatre Arts	311	265	85
Visual Arts	1978	1526	77

Source: *The Caribbean Examiner*, Volume 9, Number 1, May 2011

He avers that the students are successful in the subjects that they need to perform on the job although they may not all be successful in those subjects that are needed for tertiary education. Griffith maintains that the 'gloom and doom' analyses that are carried out on students' performance are based on the grammar school model of what students are expected to do. He insists that those subjects that require a competency-based approach, that focus on the acquisition of readily usable skills and abilities in the workplace, see students performing exceptionally well.

In his presentation of the CXC 2015 results, then Minister of Education, Thwaites also highlighted the overall success of students. He reported:

Of the 35 subjects sat, 14 showed improved pass rates over 2014 – agricultural science, building technology, economics, electrical and electrical technology, electronic document preparation and management, English B, information technology, maths, office administration, physical education and sport, principles of business, social studies and Spanish (Thompson, 2015, p. 2).

Additionally, 71 percent or 133,171 students who sat the exam were awarded grades I to III. For Maths, 62 percent of the 23,639 students passed the exam; for English 64.6 percent were successful (Thompson, 2015, p. 1). Those students who did technical and practical subjects and did not sit CXC exams but sat City and Guilds and NVQJ examinations also enjoyed a fair measure of success.

Assessment of CXC's current performance

The managers held differing views on the current performance of CXC. One said it is "average" (E2); another said, "Candidates who passed the various subjects are good" (E1). One echoed the sentiments of many educators and employers and even CXC officials: "Too many students are failing English" (E3). The job placement manager highlighted various issues within the education system and Jamaican society that negatively impact the effectiveness of CXC: "Shortage of good, quality, accountable teachers; teachers and students have poor infrastructure; tiered quality and delivery; problems at home, [and] limited parental support." She noted that "in

this environment CXC is expected to operate and produce high results” (E5). This is also highlighted by Reid (2010), Espeut (2010), and Francis (2006) among others. Bryan (1990, p. 89) suggested reasons for students’ poor performance in English:

- “Poorly qualified and overworked staff
- Poor conditions at home, speech environment
- Media errors
- CXC may be crediting students for skills which are not heavily utilized in the world of work or other highly visible areas.
- Serious mechanical and grammatical errors may need to be more severely penalized”.

Thus, it is true to say that despite the work done by the Council, the systemic weaknesses undergirding the education sector, including those inherited from the colonial system, in particular and Jamaican society in general are to be blamed for students’ lack of success in key subject areas.

In speaking to the correlation between subjects passed and the work that recruits have to do, one respondent noted that it “all depends on the area in which they are seeking employment” (E4). The majority agreed that there is a correlation between readiness for work and subjects passed especially for Maths, Language Arts, Business and Information Technology. Communication, mathematical and computation skills are all readily usable in the workplace (E1, E2, E3, E5). Despite this, the managers were unanimous in their view that the content of courses done does not adequately prepare the students for the working world: “Content may be relevant, but recruits rely on training initially ... they have content but do not apply adequately” (E2). Another opined, “They are exposed to it from an academic viewpoint, but the world of work is somewhat different” (E4). Yet another concurred adding, “More practical examples need to be included in the curriculum.” She recommended for students in third form, “a week to experience what specific job programmes require before deciding on their ‘study track’” (E5). Another suggested that “more exposure to all departments should be required for School Based Assessment (SBA) projects” (E2).

The respondents maintained that this lack of preparation is reflected in graduates' inability to transfer academic learning to situations on the job. Two of the managers said, "they rely on the on the job training" (E2) and they can transfer knowledge "after training" (E1). Two others noted that recruits could transfer knowledge "mainly in the practical or vocational subjects" (E3) and "it depends on the area to which they are assigned; some of their academic learning can sometimes be applicable" (E4). The job placement manager "assumes some are able to transfer knowledge (they remain hired) and some are not. Application depends on a number of factors which are not generally enforced in the school environment" (E5).

Generally, the managers noted, they employ graduates who have passes in four CXC subjects including Maths and English or a combination of CXC and GCE subjects. They also employ those who are successful in the national Secondary School Certificate (SSC) examinations at the grade 4 or 5 level. The managers indicated that preferential treatment is not generally given to graduates with CXC or any other qualifications. The requirements of the job, experience and qualifications are usually the determinants of employment. However, one of the managers noted that a graduate from the HEART programme may "have more going for him than a CXC student because of the additional training provided" (E5). Consequently, we can infer that due to the concrete nature of their programmes, those students who pursue practical subjects or are engaged in vocational programmes are better prepared to function on the job upon completion of their programme. For some subjects, the CXC syllabuses provide opportunities for students to apply the theory learnt, for others, this is not done. Maybe the Council should consider this when they revise their syllabi, or the Ministry of Education and/or teachers can implement strategies that will help students to transfer and apply theory, skills and knowledge to real world situations.

Some stakeholders maintain that students should learn work ethics to readily transfer these to the workplace; however, most of the managers did not believe that CXC should be responsible to cultivate appropriate work ethics among graduates. One suggested, "Ethics is a matter of values within. It doesn't matter if they have CXC or not" (E1). Another opined, "Work ethics comes more from how the individual was socialized" (E3). Yet another concurred: "It all depends on the

individual. It is therefore essential that work ethic be part of the CXC curriculum” (E4). On the contrary, the other respondent, pointing out that the global environment expects it, asserted that, “Work ethic is not dependent on CXC qualification... [it] is more a function of the home environment.” These views from the work force representatives suggest that despite the content and practical assessment strategies employed, the Council has fallen short in imbuing students with the work ethics, knowledge and skills that are required in the working world. However, some respondents feel that the Council should not be held responsible for inculcating values; the hidden curriculum, other subjects, and/or other socializing agents, should be charged with this responsibility.

In the Report on National and Regional Secondary Level Examinations and the ROSE II project, Dwyer, Harris and Anderson (2003) document their findings from surveying “important sectors of the business community” (p.19). All the business leaders were familiar with the CXC examinations and the vast majority “rank qualifications and experience ahead of other considerations” when recruiting. Nevertheless, they “give heavy weight to attitudes toward work and clear and comprehensible speech” (ibid).

As revealed in Figure 7.5, other qualities viewed as important include: ability to work well with others, leadership qualities, and general deportment. The employers were also positive about their recruits concerning work ethics and attendance however they present communication issues “as areas needing special attention” (p. 20). Areas in which the employers deem the recruits as being ill-prepared include: creativity, involvement in community activities, attention to detail, respect, leadership abilities and constructive responses to suggestions and criticisms.

Figure 7.5 Importance of Criteria for Evaluating Applicants for Secondary School Graduate Level Jobs



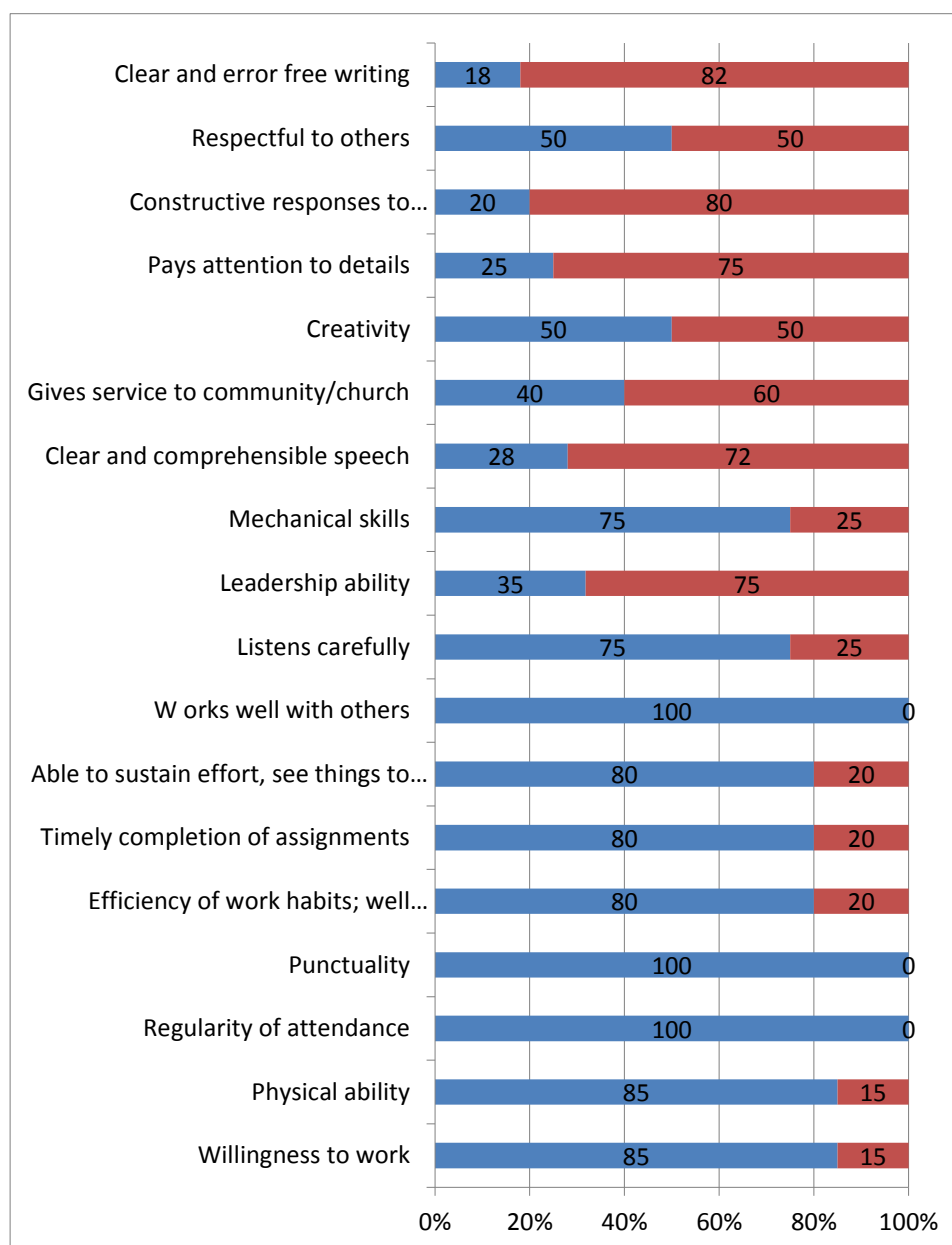
Importance (Highest = 5)

Source: *National and Regional Secondary Level Examinations and the Reform of Secondary Education (ROSE II)*. Dwyer, Harris and Anderson (2003), p 20.

Figure 7.6 reveals employers' perceptions of the level of preparedness of typical entry level applicants. Evidently, although graduates may have acquired the requisite CXC qualifications upon completing secondary school, many still lack the skills and attributes that employers are seeking and are seminal for success in contemporary workplaces (Bray, 1990; Brock, 1988; Nherera, 2000; Young and Raffe, 1998; Green, 1997; Manning, 2007; Rees, 1985).

Dwyer, Harris and Anderson (2003), like some of the respondents among the interviewees, recommend that the government should develop a core Jamaican curriculum which would be aligned to the CXC curriculum, structured to cater to the inculcation of the necessary values and attitudes that graduates should possess. It should not be the remit of CXC to address work ethics, values and attitudes although through delivery strategies and assessment teachers could incorporate these in their teaching learning environment.

Figure 7.6 Preparedness of Typical Entry-Level Applicant (Selected Attributes)



Percentages are of business leaders who say that students are well prepared.

well prepared
 not well prepared

Source: *National and Regional Secondary Level Examinations and the Reform of Secondary Education (ROSE II)*. Dwyer, Harris and Anderson (2003), p 21.

National and Regional Relevance

Another problem that CXC faces is the pressure applied by stakeholders who view the CXC driven curriculum as contrary to national and regional goals (Minott 2003). Arguably, the syllabuses provided by CXC are not in fact curricula and

governments are responsible to design their own curricula, emphasizing those aims and goals that they want their citizens to pursue (Jacobs 1999; Fergus 1987).

Nevertheless, in many cases, the only guides that teachers in the secondary schools use, especially in the terminal grades, are the CXC syllabi.

One of CXC's mandates was to meet the postcolonial nationalistic needs of the region (Bailey 1996; Mitchell, 1989, Griffith 1999). The employers were asked to give their views on the extent to which national values and attitudes were inculcated in students through the CXC curricula. While one respondent observed that, "It is difficult to judge" (E3); another insisted that the Council was "not very effective [as] many complete CXC without any values or attitudes [because] CXC deals with theory" (E1). One manager rejected this view transferring the blame from CXC to society. She noted that indirectly, through "relevant subjects' SBA and group work" CXC has been "very effective but home, school, and society have a lot to do with values and attitudes" (E2). Another concurred, declaring that "...national values and attitudes [should] be a mandate of the country's education policy ... in which case this should be instilled at primary school. A course needs to be developed and taught in regard to values and attitudes" (E5).

None of the managers could confirm whether CXC-qualified employees were more nationalistic or patriotic than GCE graduates. Responses included: "cannot compare" (E2), "cannot say" (E3), and "no" (E4). One noted that more jobs currently require or advertise for CXC qualifications (E1). Another explained that those students who do not do British-based examinations do not do CXC out of a sense of patriotism but because they "lacked the funds" to do GCE examinations or "they did not see themselves conducting further studies in the UK" (E5). The data suggest that there is no relationship between patriotism and examinations which students do, since the examinations are not necessarily nationalistic or local in their foci or emphases. In this regard then, we may infer that this aspect of CXC's mandate has not been achieved. Arguably, this may be an unreasonable demand on the Council and should be the purview of the government as previously indicated.

Government officials were asked to comment on the view that there is a disparity between the national goals and CXC exams. One had no response (ME4); another said that perception "could be correct" (ME1). Another embraced a general

perspective and affirmed that “national goals and CXC are in alignment – education for all” (ME5). Yet another, speaking to one of the concerns of small states that contemplate regional boards, related that “A regional exam will not necessarily reflect strictly national goals” (ME3). Another concurred noting that the two (CXC and national goals) “agree to an extent.” In that:

“...we must have core skills: the mind has to conceptualize; the heart has to give the passion and the hands must do the things that the mind has conceived. We need the core subjects by CXC to have our professionals for the future. They must be trained properly and equipped. ... We cannot be insular” (ME2).

Another official noted, “There are large numbers of students who are marginalized by exams because of their achievement levels in areas such as literacy and numeracy. Once provisions are made to manage this problem, then goals will be synchronized” (ME6). This suggests that the government, through the Ministry of Education, must tackle learning problems before students can be optimally successful in CXC examinations. In fact, in their restructuring of the education system and the implementation of varied initiatives and programmes, they have tried. Yet the results in key subjects are poor and the critics, chief among them Dr Ralph Thompson and Dr Dennis Minott, two educators who systematically analyze the CXC results each year and publish reports and criticisms in the national papers, lament the ills of the system which continue to produce poor performing students (Anderson, 2004; Steer, 2004; *Jamaica Gleaner* Online, 2006; Thompson, 2003; Thompson, 2004).

The CXC representatives were asked if CXC, through curricula, plays a role in addressing developmental and social issues in society. One teacher/marker said she did not know. The other two responded in the affirmative. The Communication Studies marker pointed to the “essay component” which focuses on “current trends impacting on society” (CM1). The geography marker noted that in her area, they deal with “...issues that affect Caribbean and other peoples... disasters and some problems that affect us” (CM2). The Syllabus Officer corroborated noting that,

“Governments and industries send information to CXC and they are incorporated in the syllabi – current issues, reform, copyright, access to information ... some subjects lend themselves to it more than others” (C1).

In explaining how CXC facilitates development issues, the Pro Registrar pointed to the fact that the subjects are,

“...not an end in themselves but a means to an end – development of the Caribbean region. Geography, Economics, Math are definitely development oriented. CXC is a major pillar of experience for students, hence the value of involving teachers in assessment. They provide feedback which is embraced for further development” (C2).

Despite negative perceptions in the media, CXC’s role in meeting the needs of Caribbean societies was positively assessed by the CXC representatives: CXC “responds to needs as directed by participating governments through the representation on the Council, the Schools Examination Committee and Syllabus Development panels” (C3). The Syllabus Officer also noted that CXC “provide education and spin offs: development of human resources, safety, good citizenship, problem solving, decision-making. ... in meeting education goals, CXC facilitates the goals of society” (C1). Additionally, CXC acts as consultants and conduct market research on educational needs. The officer noted that there are other areas in which they could offer service – “agriculture, psychology,” for example as the “needs exist” but funding was not available to pursue those areas. The Pro Registrar affirmed that sub-committees of the Council “ensure contribution to regional development and addresses regional concerns. ... thus they review syllabuses and revise” bearing in mind the “factors affecting the region” (C2). Thus, despite what the general public knows and says, the Council does, in fact, play a role in making students knowledgeable and aware of issues that are pertinent to the development of the region, thus successfully fulfilling its mandate.

The markers also attested to CXC's role in meeting the needs of Caribbean societies. One noted that even after successful completion, many students "are not prepared to move on and function effectively especially as it concerns language use" (CM3) but the others were positive in their assessment. One intimated that, "Exams are regional, so students are exposed to what happens in other territories. ... Students function well to an extent and knowledge gained will help; students can adapt" to society's needs (CM1). The geography teacher/marker noted that:

"CXC does a good job in meeting needs due to their level of accuracy in measuring students' abilities and learning outcomes. Students are helped to contribute to society....and CAPE helps to prepare them for tertiary education" (CM2).

In addition to concerns about relevance of content to national and regional foci, another major preoccupation that Caribbean societies and other small states face is that of cultural penetration via mass media, agents of globalization/neo colonialism, which shift the focus of importance and relevance from the local to the global. Popular opinion is that the education system should help to create media literate citizens who will be judicious in their consumption of imported media. When asked whether the CXC curricula can or do play a role in combatting the effects of cultural penetration, one government official answered in the negative, one in the affirmative and the others elaborated:

"Specific CXC subjects may help to combat cultural penetration such as Social Studies and History; Religious Education and others may be viewed in this light" (ME5).

Another identified cable and local television as causative agents of cultural penetration and essentially absolved CXC of the burden to correct this: "CXC is doing much but government needs to take action to enforce laws" (ME2).

Another concurred, “It is not clear that the CXC was designed to combat cultural penetration as that could very well-lead to insularity. What it provides is a basis for making informed choices for cross culture fertilization” (ME4).

These views seem to corroborate the perception that it is really the government’s prerogative to design and enforce elements in the national curriculum that will address local nationalistic and patriotic concerns and developmental issues, instead of relying on the Council to combat the neocolonial forces that infiltrate the region. In fact, although CXC syllabi do address regional developmental and nationalistic issues, this is done only in those subject areas that lend themselves to their inclusion. Thus, the onus is on developers of a national curriculum to weave these strands into the designated learning plans of students.

The Caribbean thrust of the syllabi - meeting the need for relevance

The issue of relevance of syllabi, as detailed in Chapter Four has plagued the Jamaican secondary education system from the pre-emancipation years. Small states are traditionally consumers of the examination systems of metropolitan countries and thus the content that is embraced may be totally irrelevant to their needs (Bray, 1990; Munboddh, 1987; Watson, 1984; Patel, 1984; Harber, 1999; Dove, 1980). Nationalistic sentiments among governments led to CXC being mandated to create suitable material that would speak to the culture, goals and emphases of Caribbean people (Bailey, 1996; Goodwin, 1989). In many cases, stakeholders accuse CXC of not fulfilling this mandate. Thus, this is another problem which impacts CXC’s success in Jamaica. However, as presented in Table 7.15, the CXC representatives think that they are fulfilling their mandate.

Table 7.15 CXC Representatives' views on the Caribbean content of syllabi

Markers/Teachers' Views	CXC Officials' View
Language and Literature yes room for improvement; Social Studies is relevant. Language teachers should be conscious and use relevant activities to help students master language.	Quoting Augier and Irvine 1998 – The compelling argument to break loose from Cambridge was the desire for syllabuses with a Caribbean content where possible and not possible as in Math for ways in which the tests might take account of cultural factors.
CAPE is more so for Communication Studies... languages in the Caribbean is a unit which focuses on how people express themselves. It is related to what obtains within the territories.	Despite the Caribbeanized content we adhere to rules of curriculum development. The international community requires 60 percent international and 40 percent local, so students can fit in wherever they go.
Still global but with a Caribbean flair. For example, Geography; CXC does everything else that GCE does but questions might be more biased to the Caribbean and areas in that same latitudinal belt.	Some subjects for which the Caribbeanized content is particularly noticeable are Social Studies, Geography, Economics, Principles of Business and History.

Mitchell (1989) examined the response of Jamaican teachers of English to the CSEC English A exam and found that the bulk of the teachers in her sample (68 percent) had agreed that CXC was meeting the needs of Jamaican children. Although 88 percent of her respondents thought that teachers were not adequately prepared to teach the subject, 79 percent believed that the “CXC exam enabled students to contribute reasoned opinions on social and other issues.... The overall impression from the data collected ... was one of preference for the CXC examinations” (p. 201). Additionally, she found that all categories of teachers “thought that CXC was meeting the needs of the children by setting questions with which they could relate” (p. 210).

All the government officials also asserted that CXC exams are sufficiently Caribbean in their focus: “Undoubtedly” (ME6). “Yes, it is” (ME1). “Generally, yes” (ME3). “The aesthetics are very Caribbean – Lit, Drama, Music, Art – but they are also international” (ME2). Despite the consensus, three respondents spoke to limitations or weaknesses, highlighting the concerns in small states that want to meet the demands of globalization, as explored in Chapter Two:

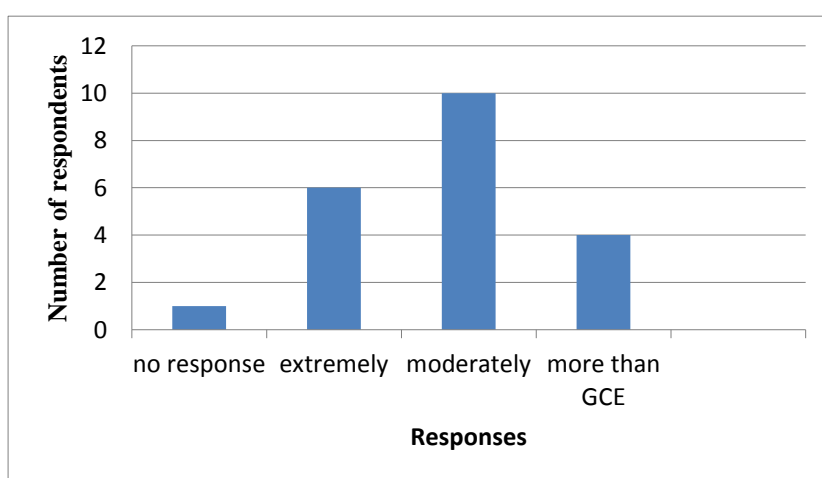
“A balance has to be struck between the Caribbean focus and recognition of the realities of globalization and the need to prepare citizens not just for the country or the Caribbean, but for the wider world” (ME4).

Another, concurring, opined, “...there is still room for improvement. However, the exams cannot be focused only on the Caribbean as we are operating in a global economy” (ME5).

As indicated by their responses, CXC representatives and government officials generally agreed that the content required by CXC syllabi is sufficiently Caribbeanized but despite this, the stakeholders are concerned about the need to remain current for the global context. As the details reveal, despite the Caribbean focus, the CXC do manage to maintain an international balance.

The teachers in the survey were asked to add their views to this aspect of the debate. Figure 7.7 below, depicts teachers’ evaluation of the relevance of CXC syllabi to the needs of the students. The majority thought that the syllabi are relevant to the students’ needs; only a few (4 or 20%) thought they were more relevant than GCE O/A Levels. One respondent, who chose the moderately category, also chose more relevant, hence the overlap with the total being more than 20 (100%).

Figure 7.7 Teachers’ assessment of the relevance of CXC syllabi



The teachers were asked to evaluate whether or not the CXC syllabi are Caribbeanized. As revealed in Table 7.16, the respondents generally believe that the syllabi are Caribbeanized; nine (45%) affirmed that they are more Caribbeanized than GCE O and A'Level exams. Three, who indicated that they were sufficiently Caribbeanized, also said that they were more so than GCE examinations, hence the total being more than twenty. Examination of the details provided earlier from selected syllabi, helps to confirm the extent to which the content is in fact Caribbeanized. Arguably, this will be more visible in some subjects such as Agricultural Science, Geography, Caribbean History, Social Studies, Caribbean Study, Communication Studies and English Literature.

Table 7.16 Teachers' assessment of the extent to which CXC syllabi are Caribbeanized

Responses	Number of Respondents
Sufficiently Caribbeanized	11
Not Sufficiently Caribbeanized	2
Unsure	1
More Caribbeanized than GCE O and A Levels	9
Less Caribbeanized than GCE O and A Levels	0

Additionally, the CXC officials, excluding the markers, were asked about the rationale for the foreign languages that CXC offers. All confirmed that regional factors determined the choices:

- “The region is multi-lingual with English, Spanish and French widely spoken” (C3).

- “CXC serves 17 territories; their location and Free Trade of the Americas [plus involvement with] Central and South America” also determine the languages (C1).
- “Trade, international travel, the global environment and politics” also influenced choice of subjects (C2).
- The Pro Registrar intimated that they “...may introduce other languages, for example Japanese, due to their business and political presence in the Caribbean” (C2).

It is safe to say then that the Council is consciously making an effort to meet the needs of the region and offer subjects that are relevant to the needs of and enhance the Caribbean aspects of the candidates’ lives.

Learning Outcomes – affective skills

Another perception of the public that poses a problem for and puts pressure on CXC is the view that the courses that students pursue do not help to develop their affective skills. Curriculum developers, functionalists, sociologists and educators agree that schools, through their procedures and products and the hidden curriculum should contribute to inculcating positive values and attitudes in their charges. Embedded in CXC’s mandate was the postcolonial hope that they would be able to imbue Caribbean graduates with the requisite values that would foster nationalistic sentiments and render them useful citizens of the Caribbean and the Diaspora (Bailey, 1996; Goodwin, 1989; Griffith, 1999; Jervier, 1976; Gordon, 2009). In fact, in *The Caribbean Examiner*, October 2010, the Council reported that they had incorporated in their revised syllabi, content that would help to meet the requirements of the “Ideal Caribbean Person” adopted by the CARICOM Heads of Government at their 18th Summit and to which all Caribbean Group for Cooperation and Development (CGED) member countries might subscribe. This list of ideal qualities incorporates affective skills and “provides a useful lens through which to apprehend the ultimate desirable outcome of the education system” (p.40). See Appendix 3 for description of the Ideal Caribbean Person and also the initial list that

emanated from the 1961 meeting of the initial architects of the Council. Compare also with Gift's 1996 "Image of the Caribbean Graduate."

Speaking to the affective learning outcomes that CXC curricula are expected to foster, varied opinions emerged from the Ministry of Education representatives:

- "cooperation, peaceful coexistence, tolerance of differences" (ME3),
- "...social skills, penetrate human spirit; [there is a] wide gamut of subjects to cater to affective skills" (ME2).
- "Cooperation, research, continuous study, enquiry, citizenship, productivity, self-advancement" (ME4).
- "All three learning domains are targeted and certainly it is hoped that students matriculate for CAPE which facilitates enrolment in tertiary level programmes" (ME6).
- "They are trying to help students analyze, synthesize and apply skills as a demonstration of specific abilities to use higher order skills" (ME5).

One respondent, unsure of this aspect of the curricula stated that "... the exams do not cater to the affective domain" (ME1). Another, who had enumerated some of the skills, affirmed, "Much is being done, but continuous assessment is needed" (ME2).

When asked, how, if at all CXC curricula develop affective learning skills, some of the CXC representatives confirmed that they do. The former employee obviously did not think that this was the purview of CXC. She noted that "CXC provides a syllabus. Individual territories provide the curricula" (C3), suggesting that it is not CXC's prerogative to develop those skills. There were other views to the contrary:

"...much taken into account... mainly through the methodologies that are used; students have to work together, give and take, cooperate. Learning together is an integral part. All domains are considered fully" (C2).

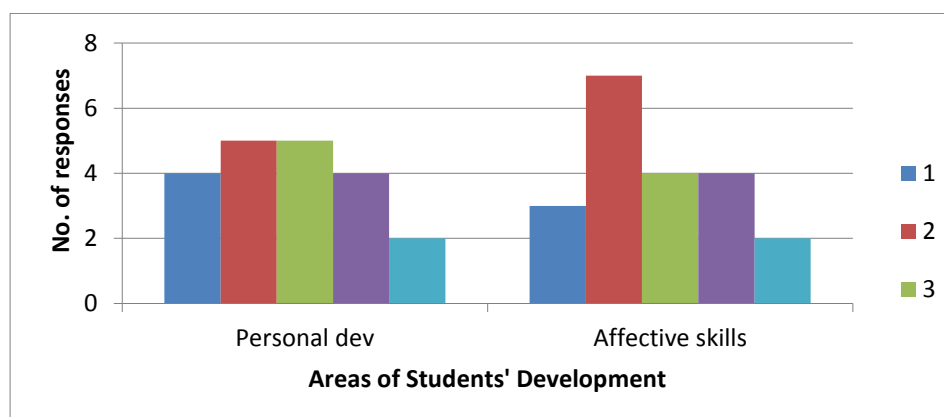
The teachers/markers held diverse views. The language teacher said,

“It is geared more toward cognitive. They need to look more at addressing affective behaviour. The language is not used to bring out real life experiences. Students should use language to sympathize, to show emotions, when they are upset...” (CM3).

The others thought differently and affirmed that the syllabi help to develop students’ affective skills: “Yes they do. There are activities that call for interaction” (CM1). Especially for CAPE, “cooperative working is encouraged. Projects lend themselves to cooperation and social skills” (CM2).

Two items on the teachers’ survey instrument focused on qualities or traits that examinations and syllabi help to develop. On a scale from one to five, where five indicates strong feelings, teachers were asked to rank their feelings towards the following: “Self-respect and self-worth are developed among students who sit CSEC and CAPE examinations.” and “Students who do CSEC and CAPE courses develop positive affective skills such as team work, consideration for others and tolerance.” Figure 7.8 presents their views. In each case, only two teachers were in strong disagreement with the statements. The majority indicated a measure of agreement, and a few were undecided. In this regard, the teachers’ views seem to cohere with those of employers as found in the Dwyer, Harris and Anderson report (2003).

Figure 7.8 Teachers’ views regarding the acquisition of personality traits and affective skills among students



Despite the qualifications obtained, students are generally not adequately equipped with the social and affective skills that are desirable among employers. Again, we can ask whether or not the Council, which is responsible for syllabi, assessment and certification, or the government through a secondary education curriculum, or parents and social organizations should be responsible for inculcating these attributes and skills in graduates.

Assessment strategies

CXC prides itself on the assessment strategies that they utilize, yet this is another area that has posed problems for them; they are constantly criticized about the strategies utilized to assess students' knowledge. This impacts their image and puts pressure on their operations. Especially in the early years, they had to repeatedly justify their assessment modality. They incorporate final examinations, which utilize varied types of items, with School Based Assessment (SBA) which incorporates projects, practical and lab work. Additionally, the input of teachers is seminal in assessing students. The markers are primarily teachers, who are given an opportunity to evaluate the examinations based on the marking experience. Reports on the examinations are prepared and presented to all schools and feedback from the schools is also incorporated with the evaluation of syllabi and examinations. Broomes (2010) points to the interactions among objectives, content and teaching method for CXC syllabi which seek to ensure that the formative and summative assessment strategies that are utilized will yield positive results. (See also Grunlund, 1998.) Broomes (2010, p. 24) affirms that the "interactive process that uses subject experts, experienced teachers, teacher educators and national subject committees" helps to ensure reliability and validity. In his model of the CXC assessment process, he highlights the interplay among all the papers done in each subject and between internal and external assessment. In evaluating the stakeholders' views of CXC assessment strategies, various aspects are presented: range of abilities tested, objectives, lifelong learners, SBAs and annual reports which all form part of the measures used to evaluate or report on assessment of students' work.

Range of abilities and levels tested

The CXC executive officers provided insights into the range of abilities examined and levels of subjects offered. One pointed out that CSEC is taken at the end of 5 years of secondary schools and CAPE is offered in two units to be taken at the end of the 6th and 7th year in secondary schools (C3). Another referred to the General, Basic and Technical / Vocational proficiencies which cater to practical subjects. “All ranges of abilities are catered to” (C1). The other spoke to the “competency levels – 1 to 5 grades. Because the tests are criterion-referenced, they are not pass/fail tests” (C2). He was critical/self-evaluative in his assessment of the Basic level which was,

“...on its way out as more students are opting for General and Basic is undersubscribed. Employers are not recognizing nor opting for Basic passes as general is more relevant to employers’ needs. Systematic study of acceptance in the region reveals it is not needed. For the technical proficiency, we need to collect data to verify acceptance level but from anecdotal reports they [graduates] are securing jobs and are suitably qualified” (C2).

Details of Basic and General proficiencies, competency levels and profiles are provided in Chapter Three. See also Appendix 4 for further explanations.

Objectives

CXC representatives were asked to evaluate the extent to which the stated objectives of courses are met in examinations. Broomes (2010) avers that the manner in which CXC arrives at the selection of questions for examination papers ensures that there is coherence among content, levels of thinking and objectives. See also Mager, 1987; Kubisyn & Borich, 2007; Carey, 1994; and Gronlund, 1998. The markers had both positive and negative views of the relationship between objectives and assessment:

“English B covers awareness of the genres. The level of pieces used needs to be addressed. Some are culture specific. For some islands, students have difficulties. In some cases, the objectives are not met” (CM3).

The CAPE Communication Studies marker also had positive and negative comments:

“The exam is constructed using questions from various aspects of the course. It is comprehensive – wide-based. The objectives are met but there is duplication of efforts between the SBA component and the exam” (CM1).

“The objectives are met because the exam is set from the objectives. Thus, once the objectives are followed, the exam is okay” (CM2).

In evaluating the extent to which the objectives, as set out in the syllabi, are met in the assessment, the majority of the teachers in the survey thought that this is done; thirteen (65%) thought this was to a greater extent, three (15%) to a lesser extent, two (10%) more than and less than GCE O’ or A’ Levels respectively.

The CXC executives presented a balanced view. The Syllabus Officer affirmed that, “Syllabus coverage has to be ensured in the examinations which must have 75 percent of the syllabus. Most have 80 percent. The objectives are measured via criterion-referenced tests. The profiles speak to content and skills” (C1). (See Appendix 4 for explanations of the profiles.) In the Pro Registrar’s estimation, “Students who master most of the skills get better grades. Technical and vocational objectives are met by the majority of the students” (C2). He admitted to the deficiencies among students: “The objectives for Maths and English are not met to some extent. Humanities are in the middle of the success continuum. Math and Sciences objectives are not met to a degree of comfort. The foreign language success rate is reasonably good” (C2).

Notwithstanding these limitations, in explaining how objectives are measured, the executives testified to the efficacy of their system which employs a “range of testing techniques – objective (multiple choice) items, free response, essay, practical tests and laboratory tests” (C3). The Pro Registrar affirmed:

“Objectives are guidelines given to teachers and trustingly they follow them. There is a correlation between SBAs and exam results. This acts as a quality control mechanism and the Council insists on their observance.... Objectives are met, hence some very excellent levels of achievement have been witnessed” (C2).

The teachers/ markers also pointed to the variety of assessment methods which ensure that all objectives are tested. One noted that the “ongoing assessment” facilitates measurement of some objectives.” She also noted that “for each objective” outlined in the syllabus, there are “several suggested activities” (CM1). For English B, the marker/teacher explained that on Paper 2, knowledge of terms, elements and various genres are tested to cover those objectives. The other identified “completion, objective type questions, short answer and extended essays, performance tasks and projects” (CM2) as methods employed by the Council. Thus, the representatives all concur that CXC provides students with a variety of assessment methods and strategies to help them to maximize their chances for success. Despite the criticism and negative feedback, especially regarding SBA, obviously, assessment is one of the strengths of the Council.

Broomes (2010, p. 26) notes that the assessment strategy – using three different papers: multiple choice, essay and project – serve to “minimise the reliability-validity tension that normally resides in any regional examinations conducted across schools and across countries.” See also Popham, 2011; Kubiszyn & Borich, 2007. In promoting the strength of the multiple-choice paper, Broomes notes that it “... consistently provide unbiased estimates of the candidates standing within some well-defined domain and also that the scores do discriminate optimally at certain thresholds or grade boundaries” (2010, p. 25). The essay paper, which utilizes both structured and open-ended questions, “does not explicitly define the content and organization of the response required from the candidate” but it is valuable as it samples content, knowledge and skills” (ibid.). The candidate must use his organizational and synthesis skills to pull together and organize those aspects of the content that are relevant for answering the questions.

For Broomes (2010, p. 26), the SBA component which takes varied forms, focuses on “the single most important features that characterizes (sic) CXC examinations; it is about validity.” In emphasizing the seminal role of internal assessment, Broomes suggests that, “Internal assessment enables formative assessment to emerge and take place within the classroom” (ibid). See also Popham, 2011. SBAs help to provide information about abilities and skills that may not be readily tested in external examinations. Thus, the overriding view is that the nature of the examination format helps to guarantee the validity and reliability of the examination despite those who suggest that there is disparity between the syllabi and the examinations.

Lifelong Learners

The provision of opportunities for lifelong learning is one preoccupation of examination boards. This need is even more pronounced as the workforce is required to retrain and become equipped with the requisite skills of the neocolonial global workplace. This may be considered as one pressure or problem that CXC has to face as it tries to make its examinations relevant and current. CXC executive representatives were asked to indicate provisions by CXC for lifelong learners - adult learners, graduates and students who drop out of school - to sit exams without having to do SBAs. They all indicated that CXC facilitates these students and “...offers examinations to private, out of school candidates” (C3). The Council offers “Paper 3/2 alternative to SBA for private candidates” (C1). The Syllabus Officer identified one area of concern regarding SBAs for the sciences. These “need lab work and the subject panels reject the idea of no labs, so students have to align themselves with recognized institutions and teachers monitor their SBAs” (C1). The Pro Registrar also explained that graduates who are repeating exams can “carry SBA grades” that they had previously obtained. Thus, the Council has made provisions for these learners providing them the opportunity for lifelong learning.

Annual Reports

The CXC maintains that annual reviews from teachers and markers form part of their assessment strategy and they use these to gauge the opinions of their

stakeholders. Having received the overall evaluation of the examiners, the council publishes annual subject reports which are made available to students, teachers, principals and the general public. CXC respondents were asked to assess the extent to which their annual reports influence syllabi and examinations and also to comment on the value of the annual reports. The markers all agreed that these play a part in the assessment process. The English B marker opined: “Teachers may not use them, but they are helpful to show teachers what to do” (CM3). Another marker noted that complaints about and poor performance on the statistical report for English A resulted in the section being “dropped subsequently” (CM1). The Geography marker/teacher affirmed that these reports “influence how teachers prepare. Markers spot flaws or weaknesses ... and make recommendations for the future” (CM2). (See Appendix 12 for excerpts from some reports).

The CXC executives also accorded importance to annual reports: “Comments from subject groups are sent to the panel of paper setting examiners for consideration and action” (C3). The Syllabus Officer noted that “Chief examiners write [subject] reports. Item analysis is done. Student performance drives items and might lead to changes in the exam” (C1). The Pro Registrar noted that the Council could:

“...check the impact of the reports at the school level. [Nevertheless] students’ performance is examined and decisions taken on whether or not to revise. They examine whether the curriculum is functioning, why students are not mastering, so surgery is done. If sections are poorly handled repeatedly, then it indicates a need for revision and the Council does so” (C2).

He also indicated that on occasion, the Council “holds seminars with teachers” when they believe that “significant numbers are not competent.” He then pointed to another issue which impacts students’ performance, “Upgrading of teachers needs to be done” (C2). Thus, despite the efforts of the Council to analyze and evaluate students’ performance in each subject area and publish reports that are sent to the schools, not many teachers seem to use them, despite the inherent benefits that

they stand to gain – guidance in preparing for future examinations and strategies on how to tackle questions on examination papers.

All the CXC respondents were asked to evaluate how feedback from teachers influences the assessment process. The teachers/markers had divergent views: “Markers give feedback, but not always” (CM3); “...workshops are held from time to time to help teachers” (CM2). The other said it is ambiguous and “...hard to say as curriculum drives assessment” (CM1). This seems to suggest that despite the feedback that teachers/markers give to the Council each year, the syllabi will determine what obtains for assessment. However, the comments from the executives negate this claim. The Syllabus Officer revealed that every year, “...teacher comments forms are given to markers. The comments on the exams are used to revise [syllabus and examinations] if necessary” (C1). The past executive affirmed the role feedback plays in the job of the Council: “Comments are considered by the relevant Council Committees and action taken as deemed desirable” (C3). The Pro Registrar concurred, affirming that, “Evaluation forms are sent to teachers from all schools to get direct feedback, in addition to the markers” (C2). He intimated that CXC tries to facilitate a “two-way flow” of information. Regrettably, he lamented, many teachers “do not see the importance of feedback.” He indicated that the Council is “not happy with the number of responses from teachers.” The teachers obviously do not realize that their input is valuable and is considered in the decision-making process; as postcolonial subjects, they are given a voice; they have a chance to direct the narrative instead of being recipients of the predetermined script, but many do not submit their comments for consideration. This then is a problem which impacts CXC’s effectiveness.

School Based Assessment (SBA)

Another important aspect of CXC’s assessment strategy that receives criticism from the stakeholders and places pressure on the Council is the SBA component. The views of the respondents were solicited on this. All the CXC officials affirmed that SBA is important and valuable. They enumerated a number of benefits of SBAs which are presented on Table 7.17 below.

Table 7.17 CXC officials' views of the benefits of SBA

Markers' views	CXC representatives' views
SBA affords students the opportunity to put theory into practice.	SBA is an integral part of the Council's testing policy. It provides an opportunity for teachers to participate in the assessment of the syllabus and offers students, under the guidance of teachers, the chance to earn marks towards their final grades.
SBAs help students to take responsibility for their own learning and ensure that they go into the exam with a portion of their grades so they have a better chance to pass.	SBA documents authentic assessment and bridges the gap between work and school.
SBAs help to reach research skills and problem solving; a lot of importance is placed on SBAs students cannot pass the paper without SBA.	SBA is valuable because it takes into account knowledge and skills that cannot be tested in paper and pencil test. It is important because it provides an accessible means of learning about students and progress... Through assignments on core content, students practice research and writing skills.

One marker, whose subject (English B) does not have an SBA component, insisted, "There should be SBA for Language and Literature as exams alone are not effective and the failure rate is still high" (CM3). This suggests that with an SBA component, the students would perform better in the subject area and their chances for success would improve. In a press release issued on January 28, 2016 reporting decisions taken at the 47th Council Meeting, CXC advised that the School Examinations Committee had deliberated on, "The revised syllabuses for English and Mathematics which include SBA component ... The SBA will come into effect in 2016 and take the form of a single project where candidates demonstrate application of mathematical principles in solving real-world problems" (CXC, 2016 n.p.). For English, the new syllabus came into effect in June 2018. Thus, this issue is now being addressed and will hopefully improve students' performance in these subjects.

In responding to criticisms of SBA's efficacy and the amount of work required, the Pro Registrar defended the testing modality: "This is not another syllabus as perceived by some. It is part of the natural process of learning...." Regarding

students getting help with SBAs, he affirmed, “If we have no evidence, we cannot say; the teachers are trained to conduct them; they provide the element of control” (C2). In highlighting the importance of SBAs, and the role they play in ensuring that examinations are trustworthy and transparent, Broomes insists that it is not *ad hoc* assessment that is carried out according to the whims and fancies of teachers. Instead, “CXC examiners, in their pursuit of reliable measures, have tended to put down in great detail, what are the assessment tasks, when they are to be administered, how they are to be assessed, and how the assessment is to be recorded” (2010, p. 26).

Despite the Council’s good intentions, Giles (2011, p. 7) reports that many schools do not comply with the regulations regarding submission of SBA. In 2011, for example, “there were (sic) still a total of 923 candidates who did not receive results because the SBA samples requested had not been submitted by the published deadline.

As revealed in Table 7.18, there were varied views among the teachers in the survey about SBA for CSEC and CAPE but none of the teachers thought it was useless. The majority agreed that they are beneficial to students. Several teachers chose more than one response. Other comments included: “Teachers need to be paid for marking SBA.” “Teachers should be given monetary incentives.” “It should be the external examiners’ work if the teachers are getting no pay.” “It is too time consuming; too much is required of students.”

Table 7.18 Teachers’ views of SBA for CSEC and CAPE

Responses	# of Respondents
It is very useful to assess learning outcomes.	9
It requires too much time and effort from students.	2
It ensures that students benefit from varied assessment.	7
It gives students a better chance to be successful	9
It gives teachers extra, unnecessary work.	3
It is useless.	0

Giles affirms that the Council had intended that the SBA tasks should be treated as home-work and not additional work. However, this has not been the case. Both students and teachers complain of the excessive workload and implore the Council to review the assessment mode. She reports that in 2010 the Council “was asked to review an earlier decision and consider compensation to teachers for this ‘*additional*’ work (2011, p. 7).

Despite the complaints from teachers about the extra work involved and the general public which insists that students do not complete the SBAs themselves, others testify to the value of continuous assessment and the usefulness of having the teachers’ input in the assessment process (Griffith, 1999; Goodwin, 1989; Gibbs Beckford, 1989). Giles (2011, p. 6) reports that the SBA component was “...conceptualized as a way of helping candidates, especially those that did not perform well in the examination environment, by allowing them to enter the test with scores obtained from class work and to develop their research skills.”

Respondents’ perceptions of CXC’s current performance

Having ascertained the respondents’ perceptions of the problems, pressures and policies that have impacted CXC’s success in Jamaica, the stakeholders’ overall views of CXC’s current performance were solicited. All the respondents were asked to share their views in order to gauge the convergence and departures in the stakeholders’ perceptions. The views proffered were diverse covering syllabi, content, teacher preparation, assessment strategy, and outcome. Generally, the views seemed to focus more on students’ performance rather than on the Council as an organization, which seems to suggest that in the eyes of the stakeholders, performance of the Council is measured chiefly by the students’ success in external examinations.

Some views were positive and affirmative, while others were negative and judgemental. Among the educators, two had no responses; one had insufficient evidence to comment and one said that for Language and Math “the current performance of our students is poor.” Another spoke to the insularity of the Council which runs the risk of being like GCE which was primarily British, if it is not careful. The community college representative was pleased with CXC’s performance and

highlighted the fact that “students have gone to Florida to do internship and excel” as evidence of the level of preparedness they had received from having completed CXC exams.

Ministry of Education Officials’ reactions about CXC’s current performance were mixed - positive, hopeful, though generally negative:

- “They have been doing quite well in the region” (ME6).
- “There is room for improvement – more specific subject area training or awareness is needed” (ME3).
- “...poor performance in some areas - Maths, Language and some sciences. CXC needs to be more flexible in the provision of accommodation for students with special needs. It also needs to monitor more efficiently exam scripts and SBAs” (ME5).
- “There needs to be review of aspects of the exams... [there is] poor performance across the region” (ME1).
- “While performance levels are not where we want them to be, the trend is moving in the right direction and provides a basis and encouragement for further growth” (ME4).
- “Overall, the performance is below expectation; there are pockets of excellence and expanded results in technical and vocational areas. We want wider numbers in age cohorts performing in core subjects at 1, 2 and 3. We are falling behind in core areas” (ME2).

These comments, from the representatives of the Ministry of Education, suggest that the government is unhappy with CXC’s performance and wants improvements, especially in core areas. The Council representatives, while highlighting their strengths also acknowledge that they have weaknesses that they have to address.

Table 7.19 CXC representatives' views on the current performance of CXC

<p>CXC Executives' views:</p> <ul style="list-style-type: none"> • We have serious problems with Maths and English failures. The rate is too high. This can be tackled from the teachers' point of view; they can upgrade their skills (C1). • We have a challenge catering for a large percentage of students who do not acquire certification. We are creating another type of certification for core skills to ensure some certification upon leaving school indicating their skills, with a parallel system to make students eligible to do CSEC (C1). • All the governments agree that more of their students need to produce better results; most governments are taking it seriously for survival of their countries (C2).
<p>Teachers/ Markers views</p> <ul style="list-style-type: none"> ○ There are no significant changes in operation – in things that need to be addressed for example, the marking of English (CM3). ○ The Council is still making adjustments and fine-tuning. I am pleased with the syllabuses and the exams are okay (CM2). ○ Schools need more materials and resources; they need seminars to prepare the teachers (CM2). ○ Teachers need help from CXC ... to introduce them to the courses. ... Teachers and students are in the dark... and CXC create curriculum guides but have no resources or training. CXC should do more consultation to find out the needs of teachers and provide guidance and help for teachers (CM1).

The CXC representatives also commented on their current performance. These views are captured on Table 7.19. The former employee declined to comment as she had "...been out of the system for the last eight years" (C3). The other two executives candidly provided unflattering assessments of their organization. Despite a few positive strains, the teachers/markers were also negative in their observations.

Strengths and weaknesses of CXC

The CXC representatives were asked to identify the strengths and weaknesses of the Council. The candid responses, encompassing syllabi, content, assessment strategies and students' performance are presented on Table 7.20. In some instances, the views of the markers/teachers cohere with those of the CXC executive representatives; while in others they diverge.

The strengths identified concur with the findings among the data: the nature of the syllabi, variety in the testing modalities, teacher involvement in assessment and

the quality of the marking exercise, relevance of the content, international and regional acceptance of the qualifications and the nationalism and regionalism thrust of the Council.

Among the weaknesses are the overdependence on the Council for curriculum matters, a complaint identified among other stakeholders; the low pass rate in some subjects, the need to develop more links with stakeholders and involving non-teaching professionals in the marking exercise.

Table 7.20 CXC representatives' assessment of their strengths and weaknesses

STRENGTHS		WEAKNESSES	
CXC Executives	Teachers/markers	CXC Executives	Teachers/markers
The objectives are set out in the syllabus and are available to teachers, students and parents.	We have our own exams.	Overdependence of territories on CXC in curriculum-related matters.	Insulation
The range of assessment techniques	CXC facilitates nationalism and knowledge of other Caribbean countries.	Many students are not passing. CXC wants them to be certified.	Picture reproduction is not good sometimes.
The inclusion of SBAs	The curriculum provides specific information.	Technical/vocational areas not very successful in creating merger between skills and competency.	Sometimes some questions are ambiguous, especially multiple choice items.
The wide participation of teachers in syllabus design and marking.	Students are exposed to wide content base.	There is a need for more generic skills. CXC is working with HEART and other agencies to create skills-based exams.	Inadequate time to complete multiple choice papers.
The involvement of professional educators from tertiary level and ministries of education.	Variety of items – multiple-choice, essay, etc.	Monitoring of SBAs	Markers have to teach to be chosen to mark. More educated people should mark.
Criterion-referenced exams	Assessment targets students' preferences	More of current jargon needed in syllabuses.	The Council is not making use of professionals and educators at the tertiary level.
Guidance given on syllabus	Caribbean exam – students can associate with it but it is not limited to the Caribbean.	Need better links with stakeholders, for example, university and colleges.	
Profiles are well-organized.	Exams are well-structured.	The process itself is pretty expensive.	
Reporting after exams	Knowledge acquisition	Movement of people from various areas is onerous.	
Quality of marking	Skills acquisition – enquiry, data gathering, investigating	Exams catering to relatively small percentage of population. New exam CCSLC addressing that.	
Relevance of content to region		More subjects should have an SBA component although teachers would object.	
Participatory approach			
Teachers make an intervention in the assessment process.			
Acceptability and recognition by international agencies - quality enhances acceptance			

Suggestions for improving CXC

Since many people bemoan the limitations and weaknesses of CXC, it was believed that the stakeholders may have had suggestions that could improve the Council's offerings and students' performance on the examinations; so, all the respondents were asked to make recommendations to CXC. The data revealed that the respondents desired improvements in syllabi, assessment, and preparation of teachers. Interestingly, many of the recommendations were not to CXC but to government and teachers. This tends to corroborate the view that students' performance is not as a result of CXC's actions, but the policies and problems enacted and experienced are due to the colonial heritage and government's activities or lack of same since independence. Extracts from the data are presented below:

Recommendations of educators representing tertiary institutions

The representatives from the tertiary education institutions made various recommendations covering assessment strategies and administration:

- ✓ "Assessment should be done on a continuous basis and different approaches should be utilized since we are looking for evidence that students are competent in areas of specialization."
- ✓ There needs to be greater monitoring of SBAs "to make it more worthwhile" and prevent students from submitting work that is not their own.
- ✓ CXC "has to become more sensitive to the needs of CARICOM states and develop different strategies for examining, perhaps move to a modular format of exam."

Recommendations of Ministry of Education officials

While two of the government officials had no recommendations, the others did speaking to syllabi, assessment strategies and teacher competence:

- "They need to diversify the range of syllabi and means of assessment such as oral, on line, out of school assessment and special needs accommodations."
- "Assessment strategies. SBAs not always honest. Assessment by team."

- “Demand higher levels of specialization, greater depth, more conscientious training of teachers in delivery of syllabi; opening it up to the general public – independent candidates; more localized centres to facilitate independent students. Keeping fee within the capacity of the average earner.”

Recommendations of potential employers of CXC graduates

Among the Workforce Representatives, one offered no recommendations to CXC, but the others made various, not only to CXC, as revealed by Table 7.21, (focusing on content and assessment strategies), but also to teachers and government.

Table 7.21 Workforce Managers’ recommendations

<p style="text-align: center;">Recommendations to CXC</p> <ul style="list-style-type: none"> • Do more to promote top achievers. • Extend SBA time in organizations. • Provide more past papers. • Provide more training for teachers. • Audit the understanding of curriculum and application of assessment tools with local teachers.
<p style="text-align: center;">Recommendations to teachers</p> <ul style="list-style-type: none"> • Apply models • Take children on field trips to see reality.
<p style="text-align: center;">Recommendations to government</p> <ul style="list-style-type: none"> • Weed out teachers who do not spend quality time on task. Recruit industry or business people with strong background in Mathematics and Science etc. Provide incentives. Subject them to teaching credentials... These would provide “work shadow” and prior knowledge about employment. • Job swap with specialists from other English-speaking countries. • Hold principals and school boards accountable for CXC and CAPE grades.

These views emphasize the need for a joint effort among chief stakeholders to ensure students’ success. The respondents are cognizant of the fact that for CXC to be successful, efforts must be made not only by the Council but by other stakeholders in the education process.

Recommendations of teachers

The teachers in the survey had various recommendations to make to CXC. Table 7.22 presents the summary covering SBAs, teacher preparation /guidance, content and support materials. Most of the recommendations focused on content. Various teachers thought that there was too much breadth – too much for students to cover in the designated time frame - and that support materials and texts are unavailable.

Table 7.22 Teachers' recommendations to CXC

Content <ul style="list-style-type: none">• Test students on objectives not activities.• Check for disconnect between topics and specific objectives.• Syllabus is too expansive for CSEC and CAPE.• CXC should ensure that materials are readily available for topics on syllabus, especially relating to the Caribbean.• CXC should have more seminars for the school year instead of dealing with topics that are difficult for teachers and students.
Teacher <ul style="list-style-type: none">○ CXC should provide more training to new teachers preparing students for exams.○ Provide teachers with relevant support materials.○ Some guidance should be given in breaking down topics so teachers will know how in depth to go.
Time <ul style="list-style-type: none">▪ More time needed for listening comprehension for CAPE Spanish.▪ Increase time period; shorten syllabus.▪ Much more time needed to prepare students for CAPE.
SBA <ul style="list-style-type: none">○ There should be SBA for all areas being tested in a subject.○ All CSEC subjects should have an SBA component.○ Reduce the amount of content and tasks for SBAs.

The future development of CXC

The stakeholders had varied perceptions regarding the future development of CXC. These are also presented here and may be considered as recommendations. Government officials offered both commendation and criticism. These are presented on Table 7.23 below.

Table 7.23 Government officials’ views of the future development of CXC

Positive views	Negative views
A good exam generally.	Some refinement needed.
The syndicate is rather proactive and has been adjusting their offering as the needs of society dictates. It will always be relevant and a solution to our assessment needs.	They need to continuously review and fine tune current subject offerings.
Good foundation laid, CXC can only continue to build on it.	Greater integration easier movement of personnel, common bottom line.
They cannot do more concerning our exam situation. [CXC is] considering regional certification of teachers. Additional subjects are coming on stream....	

These findings seem to suggest that the government is generally pleased with the CXC offerings. It follows then that the other key stakeholders (parents, teachers and students) will have to play their part to improve the students’ overall performance in CXC examinations.

Only two of the educators commented on the future development of CXC. One hopes that CXC “will make adjustments” to prevent insularity and the other asserted that, “There will be no improvement in performance if certain steps are not taken to deal with the type of students we get at the secondary level and the quality of the teachers we employ to teach them.” It is important to note that the Council cannot address this last concern; this rests squarely in the hands of the government and the Ministry of Education.

Among the workforce representatives, two had no comments on the future development of CXC. The others focused on CXC’s need to improve its offerings to make students capable of functioning in the current global economy. Table 7.24 presents the views.

Table 7.24 Managers' views on the future direction of CXC

Go technological. Offer distance examinations via the internet.
Offer teaching on line. Work answers and post them on line.
Implement strategies focused on values and attitudes, work ethics, and focus on information applicable to the working world to be more influential.
CXC needs to realize that if CXC passes remain low across the region for the Sciences and other critical subjects, it would have failed its member states to provide the basic raw (human) materials for developing a capable and intelligent workforce.

The CXC personnel were asked to speak to the future development of the Council. Table 7.25 presents these thoughts.

Table 7.25 CXC representatives' views on the future development of CXC

Teachers/Markers' views	CXC executives' views
CXC needs to create more balance between the Caribbean and the world.	Its future is assured provided it continues to be responsive to the needs of the region as indicated by participating territories.
Introduction of other disciplines.	CXC is moving towards a high degree of technological use – SBAs on line – easily accessible; virtual science etc.; results readily available.
Some things on paper should be put into practice.	Marking in all territories to save money but transparency important. Explore ways to be more cost effective
Teacher involvement	Collaborating more with university
More workshops in areas that are weak for teachers	Devising curriculum for the entire school system
Suggestions made could be acted on.	Certificate of core skills
Structuring – time allocation; speed/knowledge tests	Further challenges in the marketplace
Supplemental materials in modular form	CXC exams at grade 8
Model answers as Cambridge used to do	Common standard across the region
The Board could be more proactive.	Contemplating giving up the Associate Degree due to opposition; remain at the secondary level
	CXC going into schools to help teachers
	Governments can contract the services of CXC to help to do workshops in schools.

The executive representatives were, once again, more effusive in their thoughts and were far-reaching in their hopes for the future speaking to technological advances, online modalities, cost savings, and greater collaboration

with teachers and government. Conversely, the teachers spoke to issues that impact them directly: receiving model answers to questions, more workshops and teacher involvement; more subjects, and greater global focus. Interestingly, in recent time CXC has introduced online grading of most examinations, thus reducing costs and they introduced, in 2015, five “New Generation CAPE Subjects” to meet the demands among students.

Summary

From the data gathered it is safe to conclude that stakeholders and critics are aware of the factors external to CXC which impact the Council’s effectiveness in Jamaica. International policies and pressures, trade and grant arrangements with international lending agencies, government policies, private sector involvement in the education system and paying for students’ examinations, school policies, infrastructure, school structure, environment and management, teacher quality and pedagogy, social class and students’ home and community life all impact students’ performance.

Conversely, the data indicate that the stakeholders generally agree that CXC has, to a great extent, fulfilled its mandate and have provided examinations and qualifications which are accepted internationally and which have replaced colonial examinations. They have introduced many subjects, revised syllabuses and examinations, introduced new programmes and have increased the opportunities for more students to access certification. Their assessment strategies, content breadth and depth, the extent to which the syllabi help to inculcate desirable, globally required skills, values and attitudes must all be viewed in relation to the policies, problems and pressures that impact the CXC’s provision of qualifications in Jamaica. Overall, the Council has had mixed ratings from the stakeholders included in this research. The perceptions regarding their performance in fulfilling their mandate are varied. Government, tertiary educators, some teachers and CXC representatives believe that CXC are successfully serving the region, providing a relevant, Caribbean alternative to metropolitan examinations, while others, including employers, politicians and education critics insist that because of the overall poor performance

of students in core subjects, the Council has to improve its offerings. The ensuing chapter provides a summary; conclusions will be drawn, and recommendations proffered to enhance CXC's impact on secondary education via examinations in Jamaica.

CHAPTER EIGHT

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This research set out to evaluate CXC's success in Jamaica and to assess the extent to which the Council has carried out its mandate and replaced overseas-based, colonial GCE examinations. We have found, based on analysis of reports, reviews, and stakeholders' views that CXC has been successful in producing syllabi and examinations that cater to and are relevant to regional demands and aims. The data have also confirmed that various factors and tensions have impacted the delivery of secondary education in Jamaica since the pre-emancipation era. Some of these have been so entrenched that modern attempts to modify and render the system relevant for globalization have proved futile or have produced minimal success.

The strengths of the data presented lie in the fact that the views are diverse and emanate from across the island, various sectors of the Jamaican society, government and CXC officials. Additionally, the comparison of results among students sitting both CXC and GCE exam is useful and adds to the existing body of investigations into the efficacy of the CXC.

The major limitation of the data is that the primary data were collected in the very early years of the thesis journey, so any new perceptions of the stakeholders are not captured; returning to the field may have helped to unearth changes in the national views about the effectiveness of the CXC in Jamaica. The statistical data on students' performance in various subjects do not cover recent years as my migration from Jamaica limited my access to the recent data. In Chapter Three, I was able to present some of the recent innovations and overall performance of the Council, but the latest statistics on performance in various subjects among Jamaican candidates are not presented.

The balance of relations and tensions among the Council, global forces, national context, and implementation constraints all demonstrate that reforming and replacing an examination system, especially in small states, cannot only be focused on curriculum and examination reform. National contexts will determine

the interpretation and translation of global forces which dictate changes in education systems. Diverse stakeholders are integral to develop a more comprehensive and unified strategy to ensure students' successful preparation for and deployment into the workforce. Consequently, recommendations are made to all the relevant stakeholders to reduce the impact of these tensions.

Summary

Various policies, problems and pressures have contributed to the overall performance of the Council in the execution of its duties. Based on what its mandate was, the perceptions of the CXC representatives and the findings in the literature, we may conclude that CXC has enjoyed some measure of success in responding to the post-colonial policy that helped to shape its mandate and is catering to the nationalistic and regional policies that underpin its establishment (Griffith, 1999, 2011; Bailey, 1996; Jules, 2008; Giles, 2011).

As revealed from the data and the literature, input of international lending and donor agencies have impacted, both negatively and positively, the success of students in CXC examinations (World Bank, 1999, 2005, 2007; UNESCO, 1996; Miller, 1999b, 1999c; Lindsay, 2002). This would tend to suggest that CXC's success is facilitated by factors outside their remit or control and thus they cannot take all the credit for students' success. Additionally, government's policies have facilitated the pass rate of students sitting CXC exams (Lindsay, 2002; Anderson, 2004; Muschette-Kirk, 1999; Wynter, 2009; National Council, 2005; Thompson, 2003). Restructuring the education system and changing types of schools ensured more students were eligible to sit CXC exams; paying for some students to sit examinations also impacted the numbers who were successful. However, it does not necessarily mean that the national performance was better. Success has to be viewed in light of the impact of these policies external to CXC. As revealed by the data, the practice of principals entering only potentially successful students, negatively impacts CXC's progress in Jamaica (Bingham, 2003; Thompson, 2003, 2004; Cummings & Morris, 2004). However, CXC cannot truly be held accountable for this, as the policy is one dictated by school boards and principals, so it is beyond CXC's purview.

Undoubtedly, diverse government policies and actions have contributed to the extent to which CXC has successfully impacted the secondary education system and outputs in Jamaica, especially as it concerns performance indicators and increasing the numbers of students who sit terminal examinations as mandated. Due to international agreements and treaties to which the government is signatory, political expediency, panic or calculated response to stakeholders' opinions, and students' poor performance have all influenced government's policies regarding terminal examinations and hence contributed to CXC's success in Jamaica (Jules, 2008; Rose, 2006; Bacchus, 2008; Sellar & Lingard, 2014; OECD, 2014).

Despite the government's policies and strategies to increase access and numbers sitting examinations, various problems, including the inherited two-tiered colonial system, teaching strategies, students' abilities and lack of resources prevent students and by extension CXC from enjoying the level of success that could have been attained in Jamaica (Watson, 1982; Fergus, 1991; Thompson, 1996; Barrett & Barrett, 2005). Although the statistics reveal that there has been a marked increase in the number of students and the percentage pass rates of students that sit CXC examinations compared to those who sat GCE examinations, there is still cause for concern as the age cohort is still underrepresented in all the examinations (Cummings & Morris, 2004; Thompson, 2003, 2004).

Some of the pressures and problems that CXC has encountered from various stakeholders have affected their product and involvement in the region. Their initial grading scale and the nature of their examinations which require wider knowledge of the syllabi, met with opposition from some parents and potential employers. In response to this, the Council changed their grading scheme and eventually phased out the Basic Proficiency examinations (Mitchell, 1989; Bryan, 1990). Nevertheless, they have tried to provide a wide cross section of subjects to cater to the technical and vocational as well as academic spheres. Although there has been criticism of CXC examinations, syllabi and assessment strategies, the views from the stakeholders, as revealed from the data, indicate that the examinations and the syllabi are not the factors that cause poor performance of students but other systemic and inherited variables impact success. Thus, post-colonial societies are challenged to reinvent and reimagine their societies via education while demystifying

inherited world views and reinventing their realities (Jules, 2010; Brock, 1988; Miller, 1999a, 1999b; Lindsay, 2002; Ashcroft, Griffiths & Tiffin 1989).

Additionally, the data reveal that some of the expectations that the general public has for CXC are not really their responsibility. Concerns about the values and attitudes that CXC should foster seem to be misplaced, as CXC should not be blamed for what a national curriculum should accomplish (Dwyer, Harris & Anderson, 2003). The examinations are driving curriculum as is the case in many small states that do not prepare their own examinations. The syllabi are prepared for the examinations; although the CXC officials affirm that their syllabi meet international standards, they do not necessarily speak to national aims and objectives (Pillay & Elliott, 2005; Lauder & Ashton, 2011; Miller, 1999a). Thus, as revealed from the data, and as recommended by the literature and the interviewees, the Ministry of Education must ensure that other courses are designed and offered that will teach values and attitudes necessary for survival in the global economy. Additionally, parents and other stakeholders can play their part in helping to provide resources, motivate students and contribute to their success (Manning, 2007; Carlson & Quello, 2002; Dwyer, Harris and Anderson, 2003). The government must be held responsible for the national curriculum and CXC should only have to address issues related to the subject syllabuses that they provide, their examinations, qualifications and international comparability of certification. The data reveal that in general, the syllabuses have struck a balance between local and international content, thus addressing the issue of relevance which is a concern of small, postcolonial states (Miller, 1999b; Whyte, 1977, 2000; Dove, 1980; UNESCO, 2005). In keeping with the *modus operandi* of small states, that wish to ensure that their certification cater to local needs while meeting international standards, CXC adheres to international rules in order to secure acceptance of its qualifications (Bray, 1998; Watson, 1982; Lewin & Little, 1984; Munbodh, 1987; Jules, 2010; Giles, 2011).

Stakeholders are concerned that despite the potential inherent in the syllabuses, students still continue to perform abominably in key academic subjects. Consistently, the results for Mathematics lag behind those for English and the latter have not generally been favourable. The officials at the Ministry of Education, Youth and Culture, in their 2003 analysis of students' performance, point to the fact that

the students who obtained Grade 4 in the exams were adjudged as having a *“moderate grasp of the key concepts, skills and competencies”* required for success. Additionally, they had profiles ranging “...from a high of **C** to a low of **E** on average. ... For computation, most students received ‘C’ [;] for comprehension, all students received ‘D’ [;] for reasoning, more than ninety percent received ‘E’” (p.6).

One strategy that the Ministry recommended to stem the tide of failure was that teachers should pay attention to laying a solid foundation for the examinations from grades 7 through 9. This was facilitated by the ROSE programme funded by the World Bank (Miller, 1999b). An integrated approach to teaching Mathematics was also recommended. Thus, the students would be able to make a link between Mathematics and other subject areas and by extension, become independent learners capable of achieving success in the examinations and function in real life. This suggests then, that in addition to the efforts that the Council makes, through detailed, student-centered syllabuses, government, through policies and assistance from external aid agencies, also tries to improve students’ performance in this core subject.

Syllabuses and examinations are inter-related. Syllabuses guide students and teachers and help them to prepare for examinations. As revealed from the syllabus evaluation, in addition to presenting the fundamental details of aims, objectives, content and assessment, the CXC syllabi, unlike the GCE ones, provide additional details to ensure the students maximize their chances for success. Thus, they may appear to be broader than the GCE syllabuses and require more from students, when in fact, because they are student-centered, they are presenting details and additional materials to assist teachers and students (Mitchell, 1989; Griffiths, 1999; Voeth, 1990). In some cases, both CXC and GCE syllabuses show the linkages with the skills and abilities necessary for work; however, the CXC syllabuses provide more details about contemporary activities and strategies that can enhance the teaching-learning environment. However, despite the positive intentions of the curriculum planners and syllabus developers, students still perform poorly in the core subjects. Thus, they may not be using the resources to their best advantage or the other societal, pedagogical, systemic and organizational factors, infrastructural and

organizational problems, the inherited colonial dichotomy, coupled with political policies all impact students' success.

The data from the stakeholders seem to corroborate the view that the Council achieved success in fulfilling the mandate to cater to a wider cross section of students and prepare students for tertiary studies (Gordon, 2009; Griffith, 1999; Bailey, 1996). The articulation agreements with various local, regional and overseas universities also attest to this measure of success (Giles, 2011; Sam, 2009). However, traditionally, only a small percentage of secondary graduates continue to the tertiary level (UNESCO, 1983; Griffith, 2011; Reid, 2010). This means then, that the government and other stakeholders, for example parents, may need to do more to ensure that more students continue to further their education upon completion of their secondary programme. Indeed, the Council plays its part and carries out its mandate, but the negative factors that impact success must be eliminated or reduced by the relevant authorities, to ensure greater success.

Findings

Despite the efforts of the CXC, various problems, policies and pressures - internal and external, local, regional and international – have dictated what obtains in Jamaica's education system. In order to highlight the findings of the research, these will be presented in response to the research questions.

Research question 1: How does the CXC reflect the tensions and pressures of modernisation through a neo-colonial legacy in a period of globalisation?

And

Research question 4: What tensions and contradictions have been played out in the implementation of CXC in the Jamaican context?

The literature and data reveal that the historical, political, social and global environments have impacted CXC's work in Jamaica. Modernization brings with it the need to stay current and comparable with international organizations to secure

transferability of credentials among graduates (Brown, Lauder & Ashton, 2011; Dirlik, 1994; UNESCO, 2014). Additionally, small states struggle to rewrite their histories and present post-colonial interpretations of their society and people through an educational system which have embedded and entrenched colonial and imperialistic nuances which facilitated hegemonic dominance (Dirlik, 1994; Simon, 1988; Harber, 1999). In the global marketplace, small states are challenged to prepare their graduates to be able to function in any part of the globe, demonstrating adaptability, initiative and the ability to interact with all people. Consequently, small states are challenged to balance the need to develop their nationalistic and patriotic goals while meeting global demands. Thus, because of the diverse tensions that exist, despite CXC's efforts to provide timely, relevant, internationally acceptable syllabi, examinations and certification, they have not been able to assist the education system in Jamaica to prepare all their students to know themselves, interrogate their heritage and firmly plant themselves in the global workforce.

Government policies, policies of school Boards and Principals, demands of local businesses, arrangements with international agencies, the need to remain current and achieve international standards, meeting the demands of globalization, are all tensions that play a role in the level of success that students and by extension CXC enjoy in Jamaica. It is clear that although nationalistic and post colonial sentiments were the initial drivers that fostered the establishment of the Council, the need to produce students that meet international standards, who can function in the global market, has influenced the Council's activities as they seek to establish standards and articulation agreements with international universities to which graduates aspire (Jules, 2010; Giles, 2011). Undoubtedly, globalization with its inherent reliance on versatile, flexible workers who are lifelong workers, has taken centre-stage and has eclipsed the post-colonial impetus that initially drove the Council's activities. Additionally, as obtains in other small states, external international arrangements and conditionalities dictated by neo-colonial lending agencies and donors have also contributed to the emphases in the education system (Sellar & Lingard, 2014; Rogers, 2014; Holford, 2014). So, despite nationalistic sentiments and desire for independence, small states have to mediate the

contradiction inherent in their neo-colonial relationships with international agencies. These bodies have seemingly replaced the imperial masters and dictate terms and conditions for education and ultimately the level of success enjoyed by CXC.

Research question 2: What are stakeholders' views regarding the extent to which CXC examinations have successfully replaced colonial examinations in Jamaica in terms of the requirements of national identity and preparation for globalisation?

The stakeholders have mixed reactions in answer to this question. Whereas the general consensus and the examination statistics point to an increase in numbers of students who sit CXC examinations compared with those who sat GCE examinations, the views diverge regarding national identity formation and preparation for globalization. Government and CXC officials and teachers believe that the breadth and depth of CXC syllabi, their modes of assessment and their articulation agreements with local, regional and international universities ensure preparation for globalization. Additionally, the fact that great number of students go on to further their studies locally and abroad and obtain employment with multinational organizations tend to corroborate this view. Some employers opined that despite learning the theory in school, some graduates are unable to transfer knowledge to the working world, although others are trainable and are able to function adequately. Students who pursue technical and vocational subjects are generally better prepared for the working world and are able to utilize skills and theories grasped in preparation for CXC examinations.

The stakeholders also confirm that despite CXC's best efforts to reform secondary education and qualifications, internal problems, including teaching strategies, students' abilities, infrastructural problems and lack of resources, have all impacted students' success rate. Thus, although the percentage rates of passes in the majority of subjects have improved, many students in each age cohort are still not accessing terminal examinations and in the fundamental subjects such as Mathematics and English Language, the success rate is still below expectations. Stakeholders who are anxious to see graduates at a level commensurate with

international standards and escape the imposed boundaries and dichotomy, still insist that CXC has not successfully fulfilled its mandate. Despite this, the syllabuses, examination process, methods of assessment, reporting mechanism and the involvement of teachers in assessment are all considered as outstanding features of CXC and are rated favourably among some stakeholders.

The stakeholders have intimated that apart from key subject areas such as History, English Literature, Communication Studies and Social Studies which, due to the nature of the subjects, focus on the skills and attitudes needed to establish identity and contribute to nation building, the CXC has not assisted students with embracing their national identity. Additionally, the stakeholders identify the role played by the media and cultural penetration in various forms which contribute to the erosion of self and nullify the efforts of the education system to help students find themselves. The minority among the stakeholders want to see syllabi that are more relevant to national goals. The latter may be impossible to achieve as the Council serves the region and not individual countries. Interestingly, the stakeholders concurred that it is not CXC's responsibility to create a national curriculum which should imbue values, attitudes and practices that would be the backbone for nation building. Instead, the government should devise and introduce programmes in schools that will cater to these national objectives.

Research question 3: How might the CXC develop in the light of these tensions and findings?

As a regional examination body that serves various small states of the Caribbean, CXC is challenged to meet national, regional and international requirements in the preparation of their syllabi and assessments (Miller, 1987a; Fergus, 1991; Brock, 1988). Due to economies of scale, unlike the international examination boards such as Cambridge and London, the CXC would be constrained to prepare individual syllabi and examinations for nations, such as Jamaica, that want specific information relating to their national goals and agenda. The Council must remain true to its mandate and continue to provide examinations of the

highest international standards even while taking into account, as they currently do, local, regional and international events, trends and requirements (Bailey, 1996; Gordon, 2009; Carrington, 2003). They must continue to offer new subjects that will help prepare students for diverse, exciting, international careers. CXC could offer consultancy services to small states like Jamaica to devise national curricula that would address local postcolonial concerns and help to facilitate the inclusion of nationalistic and patriotic sentiments which are currently not in their purview.

Based on their assessment of students' performance after each examination session, CXC must continue to prepare and publish subject reports which highlight the areas of weaknesses in both students and teachers and continue to encourage those practices that will guarantee success. CXC also needs to continue to review their syllabi and assessment strategies, learn from international bodies and implement changes as required, in a bid to ensure that they remain current, relevant and internationally acceptable.

Conclusions

Based on the findings, we can conclude that although the CXC has enjoyed a measure of success in some areas, in others, there is room for improvement and they are deficient in key areas such as securing higher levels of success among students who sit Mathematics and English at the CSEC level. Based on the perceptions of varied stakeholders and the data presented, we can conclude that more students than entered for GCE examinations are now sitting CXC examinations; however, government policies and interventions, rather than efforts of CXC have ensured this success. Diverse examination strategies, including SBAs are advantages which enhance students' performance and help to secure a higher percentage of success. The introduction of new subjects and constant revision of syllabi ensure that CXC remain current and relevant to the needs of the society. This relevance is bolstered by interventions of the private sector and stakeholders. The involvement of diverse regional partners in the designing and revising of syllabi, setting, and grading of examinations has also proven to be among CXC's strengths.

In keeping with the postcolonial and nationalistic impetus that fostered CXC's establishment (Griffith, 1999; Jules, 2010; Carrington, 2003), some of the subjects

that CXC offers facilitate the acquisition of skills and competencies that are necessary for engendering civic and nationalistic pride; however, they are not specifically geared at combatting cultural penetration. This is one area that national curricula will have to tackle. Successful students are able, to a great extent, to fit into entry level positions in the working world, but some lack the immediate skills that the global workforce require and so have to be given on the job training.

We can also conclude that the student-centered syllabi that the CXC provide do facilitate dynamic, contemporary teaching strategies and activities that are geared at preparing students to engage positively with societal and global issues. The reporting process and the involvement of subject teachers in the grading of examinations and SBA are also among the successful features of CXC.

Implications

Despite the accomplishments of CXC, and success among candidates especially in the competency-based subjects, some students do not perform well, especially in the key areas - Mathematics and English. The education system is deficient in various areas and the government, through the Ministry of Education, must address these, if they are to enjoy a greater level of all round success. Parents, teachers and other stakeholders also have roles to play to ensure optimum success for students at the secondary level. The Council is tasked to provide syllabi, examinations and certification that meet international standards and are comparable with the offerings of the colonial examination boards that they replaced. In this regard, they have fulfilled their mandate. Therefore, the onus is on individual countries to address the issues which impact their education system in order to benefit fully from the offerings of the Council. Additionally, governments must be wary when entering into international arrangements and treaties and when accepting grants and loans that the conditionalities dictated do not impact their education product in a negative way. They must minimize the tensions and contradictions which impact the education product. Governments must also ensure that the infrastructure is in place to facilitate the creation of citizens who can contribute positively to the country's development even while eyeing the

requirements of globalization and ensuring that their graduates can function globally.

Recommendations

The chief stakeholders in the education process have a part to play to ensure success. It does not help if some are working valiantly and others are nonchalant and reluctant to embrace measures introduced to facilitate positive change and progress. A comprehensive, unified approach among the stakeholders is to be adopted to mediate and combat the tensions and contradictions that abound due to diverse forces which impact education. Thus, based on the findings, the evaluations and recommendations of the interviewees, and the literature explored, this writer makes the following recommendations:

Recommendations to CXC

- ✓ The Council should introduce new subjects, as necessary, in keeping with changing trends and demands of the workplace. Close ties with the national workforce representatives across the region is vital (Green, 2002; Davis, 2004; Bacchus, 2005).
- ✓ Online delivery of examinations is one area that the Council can consider to facilitate lifelong learning and meet the needs of those candidates who may not be able to access examination centres (Nherera, 2000; Yeh, 2008; Bacchus, 2005).
- ✓ The CXC must continue to review and revise syllabi with the aim to remain current and maintain international standards (Brown, Lauder & Ashton, 2011; Dirlik, 1994; OECD, 2014).

- ✓ The Council should continue to offer workshops for teachers across the region, especially in the key subjects, such as Mathematics and English, where students continue to perform below acceptable standards. These workshops should address the issues raised by the subject reports from the exams and also ensure that teachers are cognizant of the syllabi requirements, assessment procedures, and the link among content, objectives and assessment (Goodwin, 1989; Bryan, 1990; Gibbs Beckford 1999).
- ✓ Despite the public relations efforts of the CXC there are still people who are ignorant of their aims, processes and services; therefore, the Council must continue to be their own advocate promoting their accomplishments, articulation agreements and high international standards.
- ✓ The Council could consider introducing SBA components to some subjects such as English Literature, which currently do not have that aspect since it has been proven that the SBA is a valuable part of the assessment process (Griffith, 1999; Gibbs Beckford, 1989).
- ✓ Offering payment to teachers for marking SBA should be seriously considered and implemented by the Council.
- ✓ More stringent measures should be implemented to ensure that adequate checks and balances are in place for the SBA tasks (Griffith, 1999; Gibbs Beckford, 1989).
- ✓ Incorporating the views of the chief stakeholders in the assessment process can only result in continued improvement for CXC.
- ✓ The Council should ensure that the highest calibre of teachers is employed as script markers each year to maintain high standards (Voeth, 1990; Giles, 2011; Griffith, 1999; Gordon, 2009).

Recommendations to teachers

- ✓ As the conveyors of the content and the main persons responsible for preparing students for examinations, teachers have to ensure that they are familiar with the syllabi, have a firm grasp of the content, are knowledgeable of the objectives and are cognizant of the assessment strategies utilized by the Council. They must transmit this knowledge to the students (Harber, 1999; Simon, 1998; Dirlik, 1994; Ashcroft, Griffith & Tiffin, 1989).
- ✓ Teachers must be scrupulous and honest when they assess SBA projects ensuring that the students are in fact conducting the research or engaging in the desired activities that are necessary for the development of the skills and abilities that the projects are intended to develop (Griffith, 1999; Gibbs Beckford, 1989).
- ✓ Teachers have the responsibility to acquaint themselves with contemporary instruction strategies utilizing technology and student-centred activities to ensure that students are engaged in the teaching-learning process and reap the best rewards for their efforts (Goodwin, 1989; Mitchell, 1989; Gibbs Beckford, 1989; Brown, Lauder & Ashton, 2011).
- ✓ The screening mechanism which eliminates many students, months before the examination, should be abolished, especially in key subject areas and for students who can make the transition and improve before the examinations. Teachers should lobby for this abolition (Thompson, 1993, 2003, 2004; Cummings & Morris, 2004).
- ✓ It is the teachers' responsibility to keep abreast and be made aware of innovations of CXC, changes in syllabi and assessment standards so that they can transmit this to students to aid in their preparation and success.
- ✓ Teachers must find innovative ways to reach out to parents and enlist their efforts to assist students to do their very best and ensure success.

- ✓ Introducing more practical application of content is a challenge for teachers who must prepare students to deal with real life situations and entry level jobs upon graduating (Education Sector Plan, 2009; Dirlik, 1994; Young, 1988; EWU, 2001; Davis, 2004).
- ✓ Teachers need to engage in reflective practice and evaluate their pedagogy to ensure improvements in their practice. They must accept responsibility for and ownership of the teaching learning process and realize that when the students fail, it reflects on them; it is their failure as well.
- ✓ Teachers should avail themselves of the subject reports each year and evaluate the students' performance, point out the highlights as presented by the examiners and help students to overcome the hurdles identified in these reports.
- ✓ Teachers have to become lifelong learners; they must stay on the cutting edge of development and innovations in education so that they can improve their practice and help students to prepare adequately not just for examinations but for life (Young, 1988; Brown, Lauder & Ashton, 2011; Miller, 1999c).
- ✓ The hidden curriculum is an important part of the teaching learning context. Values, attitudes, and positive attributes are developed in explicit and implicit ways. The astute teacher is aware of and utilizes strategies to develop these aspects of their charges, even if they are not directly required by the syllabi that they teach (Harber, 1999; Miller, 1999a; Walker, 2009; Barrow, 1993; Entwistle, 1979; 2009, 2012).
- ✓ Teachers are considered as an important part of the assessment process. Their evaluation of the syllabi and examinations are treated with great importance by the Council; therefore, teachers are to submit their views as

requested and deem it a great responsibility and privilege to add their voice to the dialogue and help in rewriting the education narrative of students as they negotiate their postcolonial identities.

- ✓ Wherever possible, teachers should avail themselves of the opportunity to be script markers for the Council. This exercise helps to reveal what is expected of students on the examinations; it also helps to build camaraderie with other markers and can be a way of sharing ideas, best practices, strategies for improving practice and, by extension, students' performance (Voeth, 1990; Giles, 2011).
- ✓ Teachers should make every effort to attend workshops organized by the CXC or government bodies to help improve their practice.

Recommendations to the business community

- ✓ As the potential employers of CXC qualified graduates, the employers should ensure that they communicate with the Council and highlight the nature of the graduates that they require so that the Council can fashion into their syllabi, the desirable traits, skills and abilities that are needed for the workforce. Consequently, work force officials should willingly participate in CXC's fact finding sessions and collaborate when asked to serve on respective panels or committees so that they can be part of the decision-making process and their input will be considered in the assessment process. Their voices added to the narrative can help with the reinvention of desirable graduates who will join their workforce. (Young, 1998; Green, 2002; Brown, Lauder & Ashton, 2011; EWU, 2001; Miller, 1999c).
- ✓ Students who do practical subjects are always required to interface with the workplace for their SBA projects. Employers should make it possible for them

to experience the real world and expose them to the requirements of the workforce. Often, students are brushed aside as being annoyances who interrupt the workplace rhythm. This perception must change if the students are to be adequately prepared for the marketplace.

- ✓ Employers can collaborate with teachers and school communities and work with them to prepare students for life. They can be guest presenters and demonstrators, offering their expertise to enhance the teaching learning environment; they can provide funding to assist with the provision of materials and equipment and they can sponsor students via bursaries and scholarships to motivate them to do well.
- ✓ Like National Commercial Bank (NCB), more business entities need to partner with the government to help to improve the education sector. They will reap the benefits of their investment and the overall development of the country will be facilitated (NCB, 2010; Wynter, 2009).

Recommendations to government

Many of the stakeholders, in responding to the issues raised in the interviews, point to the need for the government to take steps to improve the education product. The perception is that if the government makes desired changes to the system, students' performance will improve. Therefore, the following recommendations are made to the government of Jamaica:

- ✓ The provision of education should be a priority among the social services that a government provides for her people. More budgetary allocations ought to be considered and rigorously pursued to improve the facilities and infrastructure that is available in the education sector (Bray, 1990; Anderson, 2004; Little, 2000). Various stakeholders attribute the students' failure to these deficiencies.

- ✓ It is not enough to offer lip service to the value of education and the importance of human capital to development; government must demonstrate their commitment to education by continuing to improve access to and quality of the education product. In addition to focusing on the Early Childhood and Primary levels, notwithstanding the importance of laying a firm foundation, more attention ought to be paid to the secondary level and innovative measures adopted to secure improvements (EWU, 2001; Davis, 2004).
- ✓ Far too few of each age cohort are able to sit the CXC examinations each year. The government should intervene in this situation either mandating principals to allow students to be entered for the subjects via policy or introducing measures that will ensure students' improvement so that they can be "screened in." The Summer Camp initiative could be repeated on a larger scale to provide an opportunity for students who are not yet at the desired level to sit the examination, to gather the necessary skills and content to qualify for inclusion.
- ✓ It is the government's responsibility to ensure that teachers are operating at their optimum and are delivering the content utilizing cutting edge strategies and approaches. Consequently, government should ensure that those whom they employ are the best and they should ensure that they are constantly assessed and evaluated. Those who do not meet required standards should be offered the opportunity to undergo training to improve or should be relieved of their duties.
- ✓ The government needs to ensure the creation of a national curriculum for secondary schools which incorporates non-academic elements that will address national goals, values and attitudes and help to develop students' affective skills (Dwyer, Harris, & Anderson, 2003; Miller, 1999c; Gift, 1996).

- ✓ The government's efforts to revise how they provide funding for students to sit examinations is commendable and will in fact serve to motivate them to perform at a higher standard to merit having their fees paid. In addition, as incentive, the government could offer scholarships and bursaries for tertiary education based on students' performance in the CXC examinations.
- ✓ Government should continue to liaise with CXC ensuring that their national agenda and key needs are represented and that their representatives on the Council's national committees represent them adequately.
- ✓ Government representatives in the Ministry of Education who have responsibility for secondary education should access the annual reports on each subject and upon evaluating the problem areas, take steps to remedy the identified problems among both students and teachers across the nation (Goodwin, 1989; Griffith, 1999; Mitchell, 1989; Bryan, 1990).
- ✓ The government could liaise with those countries like Barbados and Trinidad and Tobago which experience greater CXC success among their students, and take cues from them on how to improve Jamaican students' performance.

Recommendations to researchers

Based on the findings and scope of this research, it becomes obvious that there are other areas worthy of exploration that could shed light on and ensure improvements in the secondary education system in Jamaica:

- ✓ Research could be conducted into the effectiveness of the new products offered by CXC, The CCSL and the Associate Degree, for example. Their impact on tertiary education and readiness for the workforce could be ascertained.
- ✓ Trend or longitudinal studies could be done, especially among those students who had been in new secondary schools that were upgraded to high schools,

to evaluate their performance in CXC examinations. The same could be done with students who had been exposed to the World Bank-funded ROSE programme arising from the UNESCO recommendation.

- ✓ Further research could be conducted into the CAPE examinations and the effectiveness of those syllabi in preparing students for tertiary studies.

Comparison of Jamaica's results with other Caribbean countries', especially in key subject areas, may help to elucidate the extent of CXC's success and the impact of the identified factors on students' performance.

END NOTES CHAPTER 7

Details of interviewees

¹ **CXC Representatives**

CM CXC Markers

CM1 Communication Studies (CAPE)

CM2 Geography (CAPE)

CM3 English Language and Literature

C CXC Officials

C1 Syllabus Officer

C2 Pro Registrar

C3 Former Registrar

² **Ministry of Education Representatives**

ME1 Education Officer responsible for secondary schools – Western Region

ME 2 Education Officer responsible for secondary schools – Western Region

ME3 Education Officer responsible for secondary schools – Central Region

ME4 Education Officer responsible for secondary schools – Central Region

ME5 Education Officer responsible for secondary schools – Metropolitan
Region

ME6 Education Officer responsible for secondary schools – Metropolitan
Region

³ **Tertiary Education Representatives**

TE1 Representative from an urban university

TE2 Representative from a vocational and technical institution

TE3 Representative from a school of nursing

TE4 Representative from a rural university

TE5 Representative from a community college

⁴ **Employers from the Work force**

E1 Representative from an all-inclusive hotel

E2 Representative from a leading furniture and appliance store

- E3 Representative from a parish library
- E4 Representative from a government collectorate office
- E5 A job placement/workforce development officer

ABBREVIATIONS USED

A	Advanced Level
A Level	Advanced Level
AS	Advanced Subsidiary
CAPE	Caribbean Advanced Proficiency Examination
CARICOM	Caribbean Community Common Market
CARIFTA	Caribbean Free Trade Association
CCSLC	Caribbean Certificate of Secondary Level Competence
CDB	Caribbean Development Bank
CGED	Caribbean Group for Cooperation and Development
CIDA	Canadian International Development Agency
CSEC	Caribbean Secondary Examination Certificate
CXC	Caribbean Examinations Council
DfEE	Department for Education and Employment
ECLAC	Economic Commission for Latin America and the Caribbean
EFA	Education For All
ERIC	Education Resources Information Center
ETS	Education Testing Service
EU	European Union
EWU	Education the Way Upward
FYDP	Five Year Development Plan
GCE	General Certificate of Education
GCSE	General Certificate of Secondary Education
GDP	Gross Domestic Product
HEART/NTA	Human Employment and Resource Training/National Training Agency
IMF	International Monetary Fund
IDB	Inter-American Development Bank
JLP	Jamaica Labour Party
JSC	Jamaica School Certificate
MDG	Millennium Development Goals

NCB	National Commercial Bank
NGO	Non-Governmental Organization
O LEVEL	Ordinary Level
OECD	Organization for Economic Co-operation and Development
PATH	Programme of Advancement Through Health and Education
PIOJ	Planning Institute of Jamaica
PISA	Programme for International Student Assessment
PNP	Peoples' National Party
ROSE	Reform of Secondary Education
SBA	School Based Assessment
SPBEA	South Pacific Board for Educational Assessment
SSC	Secondary School Certificate
UCLES	University of Cambridge Local Examinations Syndicate
UK NARIC	United Kingdom National Academic Recognition Information Center
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
US/USA	United States of America
USAID	United States Agency for International Development
WTO	World Trade Organization

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APPENDICES

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APPENDIX 1

Growth of CXC in the initial years

Year	No. of subjects offered	No. of schools	No. of candidates	No. of subjects entries at Basic Proficiency	No. of subjects entries at General Proficiency
1979	5	281	30,276	35,351	26,233
1980	11	348	39,709	45,526	55,521
1981	13	381	45,837	51,858	84,445
1982			53,758split	169,504split	

Source: *CXC News*, Volume 11 Number 1, January 1982

Chronology of the Caribbean Examinations Council

1946	Eric Williams recommends regional examinations.
1961	Conference of Heads of Secondary School supports the establishment of a regional examining body. Representatives of Ministries of Education across the region also support the decision.
1964	Second Conference of Heads of Government of Commonwealth Caribbean countries again call for the regional examining body
1965	Caribbean Free Trade Association (CARIFTA), further consolidated the idea.
1970	Draft agreement for the establishment of the Council and negotiations regarding the headquarters.
1972	April the formal body was incorporated and established with thirteen governments as signatories.
1973	April – amendment to the agreement establishing an administrative and operational center in Jamaica. Jamaica and Trinidad signed agreement but Cayman withdrew hence 14 signatories
1974	Design phase started,
1975 – 78	50% of the Examiners (markers) and Chief Examiners work with Cambridge Examination Board, marking O'Level scripts in preparation for the exams. Training of CXC officials also done by Princeton
1977	First five syllabuses ready.
1978	First exam trials, five exams piloted in twelve countries; pretests done in more than 100 schools; markers trained through marking pretests; set question papers for exams in 1979. Syllabuses in Spanish, Business Education and Agricultural Science completed and circulated for 1980 exams. Work started on Arts and Crafts and French syllabuses. Social Studies and Integrated Science syllabuses piloted. Revisions to History and Integrated Science syllabus done in preparation of distribution of syllabuses in 1979 for 1982 exams.
1979	March - Pretesting in 10 subjects Five subjects offered in June examinations. Results issued one week late – September 15 December – marker training for some markers in preparation for Principles of Business, Principles of Accounts, Office Procedures, Typewriting and Spanish in 1980. USAID-funded programme - Secondary Education Curriculum Project - Grant Agreement signed in June to facilitate orientation of teachers

	to new syllabuses, new teaching and evaluation techniques started until 1983. CXC accommodated visits from UNESCO mission on education development, British Joint Matriculation Board, Southern Regional Examinations Board and Cambridge Local Examinations Syndicate.
1980	Eleven subjects offered
1981	Thirteen subjects offered. Preliminary examination results slips offered for the first time. Governments accepted General grades I to III and Basic I and II. Discussions on exam to replace A Levels done
1982	Home Economics Subjects:- Management, Food and Nutrition and Clothing and Textiles are offered for the first time. Industrial Arts subjects: - Woods, Metals, Technical Drawing and General Electricity are offered. Bookkeeping added to Business Education subjects. Office Procedures and Typewriting offered at Basic Proficiency level. Private candidates first entered to write examinations in subjects with no SBA components. (Book – Keeping, Accounts, English A, English B, Geography, Mathematics, Office Procedures, Spanish). 881 private candidates, 1,201 subject entries. Governments of Barbados, Belize, Jamaica, Montserrat and Trinidad and Tobago accept CXC. The United Kingdom, Canada and the United States of America accept General III, Basic I and II for employment. The University of the West Indies and the University of Guyana accept General I and II as entry qualification.
1983	French and Shorthand added. 373 candidates for French. Total of 23 subjects being offered.
1985	Anguilla offers candidates for the CXC examinations for the first time.
1986	CIDA project started, lasting until 1988 to improve the teaching of science The Netherlands Antilles offers candidates for the CXC examinations for the first time.
1987	Anguilla becomes a participating territory.
1989	January examinations are offered for the first time. Technical proficiency examinations are piloted.
1993	Cayman returns as a participating territory.
1995	Technical Proficiency added
1997	Candidate entries pass 100,000 (109, 633) milestone.
1998	CAPE introduced – piloted with seven subjects

	CSEC grading scheme changes from five point to six point scale.
1999	<p>Eighteen subjects offered in CAPE</p> <p>Articulation agreement for CAPE with the United Kingdom National Academic Recognition Information Center (UK NARIC)</p>
2003	Physical Education and Sports and Electronic Document Preparation and Management syllabuses and examinations introduced
2005	<p>Approval of the development of Syllabuses and examinations for CCSL is given.</p> <p>Approval for CXC Associate Degree is given.</p>
2006	<p>CAPE Associate Degree received official approval from the State University of New York.</p> <p>CXC introduced Caribbean Vocational Qualification (CVQ)</p> <p>CSEC subject entries pass half a million mark (528, 289)</p>
2007	<p>Caribbean Certificate of Secondary Level Competence (CCSLC introduced – first sitting</p> <p>Associate Degrees first offered</p>
2008	<p>Last sitting of Basic Proficiency examinations</p> <p>CXC introduces and awards CVQs</p>
2009	<p>CXC celebrates 30 years of first CSEC examinations.</p> <p>CXC signs MOU with UWI – School of Education Mona and Institute of Critical Thinking UWI, St Augustine.</p> <p>CXC establishes publishing agreement with Ian Randle Publishers for publication of syllabi and past papers for CSEC and CAPE.</p> <p>CXC opens digital printer.</p> <p>Five articulation agreements signed with universities in the USA for CAPE and Associate Degrees.</p>
2010	<p>CXC launches third generation website.</p> <p>University of South Florida assigns junior status to CAPE associate degree holders.</p>

	University of New England publishes equivalency chart for CAPE qualification.
	Online Registration System available for the first time
2011	CXC results available online to stakeholders for the first time.
	CXC examined over 250,000 candidates
for	CXC has more than 60 syllabi for CSEC, 46 for CAPE units 1&2, 5 CCSLC
	The Caribbean Primary Exit Assessment (CPEA) an assessment of the literacies required by all pupils exiting the primary school system is introduced
2012	India accepts CXC qualifications The Association of Indian Universities (AIU), the organization which is the clearing house for international qualifications in India has granted equivalence to the Caribbean Secondary Education Certificate (CSEC) and the Caribbean Advanced Proficiency Examination (CAPE), the two leading qualifications offered by CXC.
	The Caribbean Examinations Council (CXC) signed a Memorandum of Understanding (MOU) with Congress WBN (C-WBN) to provide values-based leadership and promote indigenous ICT development in education in the Caribbean.
2013	Digital Media is offered. MOU signed between Columbus Communications and CXC
2014	UK NARIK Benchmarking of the CCSL undertaken May/June examinations eleven papers in seven subjects marked online
2015	Caribbean Primary Exit Assessment (CPEA) launched in four islands Strengthening Second Chance Education Programme launched on ten islands
2016	CAPE New Generation subjects offered End of face to face marking; electronic marking of all scripts Articulation agreement signed with US Monroe College, Johnson and Wales University, SUNY Pittsburgh, University of South Florida, Oglethorpe University, Atlanta CSEC offers 25 subjects and 46 papers CAPE offers 47 subjects and 110 papers

2017 ACCA and CXC sign MOU to improve education and learning for accounting, finance and management qualifications.

January - Paper 1 e-testing done in seven territories for 12 subjects with 600 candidates.

Online marking of all papers begins

June 2017 - Portuguese examination first offered

July 2017 - CXC Connect first mobile app launched

CAPE overall performance sees 92.48% of entries achieving acceptable grades: Grades I to V.

APPENDIX 2

Table V-6

GCE "O" Level Examination
Entries and Results by Subjects, 1976-1981

Subject	1976		1977		1978		1979		1980		1981	
	Number sitting	% passes	Number sitting	% passes	Number sitting	% passes	Number sitting	% passes	Number sitting	% passes	Number sitting	% passes
English Language	7,464	62.0	7,993	58.0	8,969	49.3	8,024	41.1	9,013	45.8	5,026	41.1
English Literature	4,741	30.6	4,934	35.9	4,989	40.7	3,938	35.3	4,395	36.9	7,138	29.8
Religious Studies	2,430	50.6	2,817	49.3	2,505	53.8	2,348	44.9	1,581	47.2	1,390	34.6
History	4,885	53.3	5,432	53.3	5,379	59.7	4,551	57.0	4,581	52.1	2,032	52.2
Geography	3,124	35.9	3,533	43.1	3,365	41.4	2,831	39.0	2,585	38.1	1,090	47.4
Economics	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	366	13.9	601	9.3
French	460	64.3	484	57.9	430	60.2	394	55.6	337	51.9	330	49.7
Spanish	1,302	44.3	1,448	32.3	1,363	36.0	1,216	35.9	1,188	37.8	774	30.9
Maths B	4,658	39.8	5,711	32.1	6,103	31.3	5,081	31.0	3,853	25.6	2,400	20.0
Maths C	811	50.9	916	36.2	893	41.8	769	35.5	1,830	28.4	1,439	29.4
Agricultural Science	n.a.	n.a.	369	43.6	437	33.0	432	40.3	550	31.1	531	30.5
Physics	1,381	50.5	1,625	51.8	1,714	53.9	1,648	47.9	1,764	50.1	1,912	37.5
Chemistry	2,076	44.0	2,310	45.0	2,413	46.7	2,217	54.2	2,540	50.8	2,593	49.8
Biology	4,332	43.5	5,029	34.9	5,184	32.0	4,704	30.3	5,046	30.2	4,926	31.9
Human and Social Biology	1,199	42.2	1,456	36.5	1,347	33.8	1,266	37.5	1,454	42.7	1,697	39.2
Art A	863	58.1	776	44.5	809	41.9	577	44.7	564	35.1	401	40.4
Art B	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	111	54.1	127	37.8
Woodwork	92	26.1	95	40.0	449	54.9	58	39.6	82	13.4	91	37.4
Metalwork	n.a.	n.a.	130	24.0	61	29.5	70	22.8	116	19.8	123	7.3
Needlework and Dressmaking	155	41.3	152	42.1	122	36.8	122	13.1	126	23.0	88	30.7
Food and Nutrition	599	47.7	747	34.4	94	24.5	727	52.7	831	44.9	942	32.1
General Housecraft	n.a.	n.a.	27	37.0	n.a.	n.a.	10	10.0	14	50.0	39	51.3
Engineering Science	n.a.	n.a.	24	12.5	n.a.	n.a.	6	66.7	66	7.6	54	18.5
Geometrical and Mechanical Drawing	393	28.0	462	35.1	339	48.4	440	35.7	509	36.7	541	27.9
Building Drawing	n.a.	n.a.	52	36.5	56	17.9	30	20.0	33	36.4	19	21.1
Electricity and Electronics	n.a.	n.a.	8	87.5	12	91.7	9	88.8	20	65.0	38	10.5
Commerce	1,355	35.4	1,784	27.1	2,102	30.5	2,186	37.8	2,370	31.8	2,209	18.2
Principles of Accounts	720	41.9	982	39.5	1,229	42.8	1,454	42.9	1,864	44.4	2,218	44.1

Source: Calculated from Ministry of Education's documents.

Table V-5

**CXC Examination: Percentage of Candidates
Obtaining Grades I and II, 1979-1981**

(Number of candidates writing examination in parentheses)

Subject	1979		1980		1981	
	General	Basic	General	Basic	General	Basic
Agricultural Science	-	-	5.2 (115)	-	22.1 (204)	-
Caribbean History	61.6 (453)	52.7 (330)	48.7 (1,239)	42.2 (644)	60.2 (2,809)	65.6 (1,139)
English A (Language)	39.1 (1,064)	31.8 (2,009)	46.5 (2,664)	43.7 (3,061)	40.1 (6,607)	42.1 (3,655)
Geography	57.0 (214)	47.6 (223)	47.0 (698)	24.7 (235)	46.0 (2,335)	27.6 (950)
Integrated Science	-	-	54.2 (59)	-	-	-
Mathematics	26.8 (592)	4.0 (1,430)	34.0 (1,181)	21.4 (2,973)	32.4 (1,754)	28.1 (4,893)
Office Procedures	-	-	0.6 (177)	-	10.1 (632)	-
Principles of Accounts	-	-	12.5 (391)	-	26.1 (765)	-
Principles of Business	-	-	11.1 (305)	48.1 (183)	42.6 (646)	46.3 (520)
Social Studies	-	-	-	-	72.6 (95)	73.2 (123)
Spanish	-	-	36.6 (82)	39.5 (195)	-	-
Typewriting	-	-	2.5 (405)	-	-	-

Source: Calculated from Ministry of Education's documents.

APPENDIX 3

THE IMAGE OF THE CARIBBEAN GRADUATE

1. Critical thinking, creativity, and problem solving
2. Numeracy, literacy, and communication skills
3. Aesthetic qualities (capability to create for others to enjoy and to enjoy what others create)
4. Knowledge about work and capability to lead a productive life in a sociocultural milieu
5. Openness to new experiences and ability to cope with change
6. Technological literacy
7. Ability to think logically and to base opinions formed on facts
8. Moral and spiritual development and the ability to act responsibly
9. Respect for the rights and dignity of others
10. Self-worth – understanding of, believing in, and caring for self
11. Sensitivity to the fragility of the environment, the finiteness of natural capital, and the need to prevent environmental degradation
12. Self-reliance – confidence in one's ability to solve problems by exerting influence over one's environment
13. Inter-cultural sensitivity
14. Sense of a Caribbean cultural identity
15. Health and physical fitness

Source: E. H. Gift (1996). "Responsive Curriculum Development for Small Developing Caribbean States" in **Caribbean Journal of Education**, Vol. 18 No. 2, September 1996, pp.151 – 175

Conference of the Caribbean Heads July 1961

Basic needs of an educated person as agreed by the conference:

- He should know the world in which he lives
- He should know how to manipulate numbers, to read, to write, to express himself orally
- There is a need for a greater study of West Indian Literature and a greater use of recorded materials
- The graduate must be prepared ... to live in the various emergent societies of this area. Such a person must develop a sense of responsibility, must be willing to give service to the community, and in his growth due emphasis should be placed on his intellectual, cultural, religious and physical development. (Figuerola 1962, p,18)

Qualities considered to be the mark of an educated person, particularly in the West Indies:

1. the ability to meet other people and to communicate with them (especially taking into account the West Indian context of a multi-racial society;
2. the ability to accept people who are 'different' – who come from different environments, are of different racial origins, or who have different beliefs;
3. the ability to come to a reasoned decision either in a private or public matter;
4. the ability to behave under varying conditions as one possessed of a disciplined mind;
5. the ability to discover further information when needed;
6. the ability to accept responsibility, and to dedicate oneself to serving the community;
7. an adequate acquaintance with the knowledge of the ages.

The development of an educated person takes place under the following aspects: - the physical, the aesthetic, the spiritual, the emotional and the intellectual (ibid., p.19).

Source: John J Figuerola (1961). "Staffing and Examinations in British Caribbean Secondary Schools. A Report of the Conference of the Caribbean Heads," July 1961, London : Evans Brothers Ltd

The Ideal Caribbean Person

The Vision of the Ideal Caribbean Person adopted by the CARICOM Heads of Government at their 18th Summit and to which all Caribbean Group for Cooperation and Development (CGED) member countries might subscribe, provides a useful lens through which to apprehend the ultimate desirable outcome of the education system. Such a person is described as being someone who:

- is imbued with a respect for human life since it is the foundation on which all other desired values must rest;
- is emotionally secure with a high level of self-confidence and self-esteem; sees ethnic, religious and other diversity as a source of potential strength and richness;
- is aware of the importance of living in harmony with the environment; has a strong appreciation of family and kinship values, community cohesion, and moral issues including responsibility for and accountability to self and community;
- has an informed respect for our cultural heritage;
- demonstrates multiple literacies, independent and critical thinking, questions the beliefs and practices of past and present and brings this to bear on the innovative application of science and technology to problem solving;
- demonstrates a positive work ethic;
- values and displays the creative imagination in its various manifestations and nurtures its development in the economic and entrepreneurial spheres in all other areas of life;
- has developed the capacity to create and take advantage of opportunities to control, improve, maintain and promote physical, mental, social, and spiritual well-being and to contribute to the health and welfare of the community and country; and
- nourishes in him/herself and in others, the fullest development of each person's potential without gender stereotyping and embraces differences and similarities between females and males as a source of mutual strength.

Source: *The Caribbean Examiner*. "Revised Syllabuses Incorporate 'Ideal Caribbean Person'". Volume 8, No.2, October 2010.

APPENDIX 4

CAPE Examination Assessment

Performance of students is assessed in a terminal examination and an internal assessment (IA) commonly called School Based Assessment (SBA). The internal assessment enables the teacher to provide opportunity for students to acquire skills and attitudes through activities done during the course of study. The internal assessment of the students contributes to the final grade awarded.

CXC Grading Schemes

The CAPE examinations uses seven overall grades: I, II, III, IV, V, VI, VII in reporting candidate's overall results along with the profile grades, A, B, C, D, E, F and G.

CSEC The Six-Point Grading Scheme

The Caribbean Examinations Council (CXC) introduced a six-point grading scheme for the Caribbean Secondary Education Certificate (CSEC), in the May/June 1998 examinations.

The six-point grading scheme reports on the performance of the candidate under six overall and profile grades as follows:

Overall grades - I, II, III, IV, V, VI
Profile grades - A, B, C, D, E, F

Equivalence Between The Six-point and Previous Five-Point Grading Schemes

The Council has determined that in the General, Technical and Basic Proficiencies, Grades I – III in the new scheme are equivalent to Grades I – II in the old scheme.

Entry to Tertiary Institutions

The Council has advised tertiary institutions and Ministries of Education in participating territories that Grades I – III at the General and Technical Proficiencies should be considered as satisfying the matriculation requirement for four-year programmes at universities and entry requirement to community colleges, teachers' colleges and any tertiary institution offering post-CSEC programmes.

Recognition of the Six-Point Grading Scheme

Since the CXC examinations retain their traditional high standards, the certificate will continue to be accepted regionally and internationally. Already the Universities of the West Indies and Guyana, other tertiary institutions and several external educational institutions have accepted Grades I – III at the General and Technical Proficiencies for matriculation.

Employment

The Council has determined that Grades I – IV at the General and Technical Proficiencies and Grades I – III at the Basic Proficiency represent satisfactory grades for entry-level employment.

Advantages of the Six-Point Grading Scheme

The six-point grading scheme ensures a sharper distinction between the quality of performance at each grade. Thus, tertiary institutions and employers will be more clearly informed about the candidate's level of achievement.

Grade and Profile Descriptions

The overall grade and profile descriptions are:

Overall Grades

- **GRADE I:** Candidate shows a comprehensive grasp of the key concepts, knowledge, skills and competencies required by the syllabus.
- **GRADE II:** Candidate shows a good grasp of the key concepts, knowledge, skills and competencies required by the syllabus.
- **GRADE III:** Candidate shows a fairly good grasp of the key concepts, knowledge, skills and abilities required by the syllabus.
- **GRADE IV:** Candidate shows a moderate grasp of the key concepts, knowledge, skills and competencies required by the syllabus.
- **GRADE V:** Candidate shows a limited grasp of the key concepts, knowledge, skills and competencies required by the syllabus.
- **GRADE VI:** Candidate shows a very limited grasp of the key concepts, knowledge, skills and competencies required by the syllabus.

Profile Grades

- A Outstanding
- B Good
- C Fairly Good
- D Moderate
- E Weak
- F Poor

Examining 1981 CXC Results

THE FOLLOWING ARE THE OFFICIAL INTERPRETATIONS TO BE APPLIED TO THE TERMS INDICATED.

1. BASIC PROFICIENCY CONNOTES SUBJECT ACTIVITY DESIGNED TO COMPLETE A SECONDARY COURSE IN THE SPECIFIC SUBJECT.
2. GENERAL PROFICIENCY CONNOTES SUBJECT ACTIVITY DESIGNED TO PROVIDE A FOUNDATION FOR FURTHER STUDIES IN THE SPECIFIC SUBJECT AREA BEYOND THE FIFTH YEAR OF SECONDARY SCHOOLING.
3. OVERALL GRADES:
 - (1) GRADE ONE — CANDIDATE HAS A COMPREHENSIVE WORKING KNOWLEDGE OF THE SYLLABUS.
 - (2) GRADE TWO — CANDIDATE HAS A WORKING KNOWLEDGE OF MOST ASPECTS OF THE SYLLABUS.
 - (3) GRADE THREE — CANDIDATE HAS A WORKING KNOWLEDGE OF SOME ASPECTS OF THE SYLLABUS.
 - (4) GRADE FOUR — CANDIDATE HAS A LIMITED KNOWLEDGE OF A FEW ASPECTS OF THE SYLLABUS.
 - (5) GRADE FIVE — CANDIDATE HAS NOT PRODUCED SUFFICIENT EVIDENCE ON WHICH TO BASE A JUDGEMENT.
4. PROFILE GRADE — A — Above Average; B — Average; C — Below Average; N.A. — No Assessment Possible.

Samples of the 1981 CXC Preliminary results are shown below:

CARIBBEAN EXAMINATIONS COUNCIL ***			1981	***	PRELIMINARY RESULTS SLIP	
CANDIDATE B	0908 ROSEDALE SENIOR COMP.		REG.NO: 09080539	B'DATE: 14/07/66	SEX: F	
***	SUBJECT	***	PROF.	GRADE	***	PROFILES
CARIBBEAN HISTORY	GEN.	FOUR	KNOWLEDGE(C), USE OF KNOWLEDGE(C), ENQUIRY/COMMUN(N.A)			
*INTEGRATED SCIENCE	GEN.	TWO	KNOWLEDGE(B), ENQUIRY SKILLS(B), ATTITUDES(C), PRACT. SKILLS(B)			
OFFICE PROCEDURES	GEN.	TWO	KNOWLEDGE(A), APPLICATION(B)			
PRINCIPLES OF ACCOUNTS	GEN.	TWO	KNOWLEDGE(A), APPLICATION(B), INTERPRETATION(C)			
SOCIAL STUDIES	BAS.	FIVE	KNOWLEDGE(C), INTERPRETATION(N.A), APPLICATION(N.A)			
MATHEMATICS	GEN.	FOUR	COMPUTATION(C), COMPREHENSION(N.A), REASONING(N.A)			
TYPEWRITING	GEN.	THREE	ACCURACY(N.A), SPEED(B), PRESENTATION(B), PROF.(A)			

*DENOTES A WEIGHTING EQUIVALENT TO TWO (2) SUBJECTS.
THIS RESULTS SLIP IS NOT A CERTIFICATE. THE EXAMINING AUTHORITY RESERVES THE RIGHT TO CORRECT THE INFORMATION ABOVE WHICH WILL BE CONFIRMED ON THE FINAL CERTIFICATE.

CARIBBEAN EXAMINATIONS COUNCIL ***			1981	***	PRELIMINARY RESULTS SLIP	
CANDIDATE A	0320 GREENLAND SECONDARY		REG.NO.: 03201234	B'DATE: 24/11/64	SEX: N	
***	SUBJECT	***	PROF.	GRADE	***	PROFILES
ENGLISH (A)	GEN.	ONE	UNDERSTANDING(A), EXPRESSION(A)			
ENGLISH (B)	GEN.	ONE	KNOWL. & INSIGHT(A), ORGAN. OF RESP. (B)			
GEOGRAPHY	GEN.	THREE	PRACT. SKILLS(B), KNOWLEDGE(B), ANALYSIS(C)			
MATHEMATICS	BAS.	TWO	COMPUTATION(B), COMPREHENSION(B), REASONING(B)			
PRINCIPLES OF BUSINESS	BAS.	ABS.				
SPANISH	BAS.	TWO	LISTENING(A), READING(A), WRITING(B), SPEAKING(A)			

APPENDIX 5

Letter for principal of school; names have been changed to ensure anonymity and confidentiality

Erica Gordon



June 14, 2006



Mr W Willison
Principal
Sample High School
Sample P O

Dear Mr Willison

I am Erica Gordon, an MPhil/PhD candidate at the University of London's Institute of Education. I am conducting research on the topic: **Caribbean Examination Council (CXC) Examinations – Postcolonial Efforts to redesign Caribbean Secondary Examinations**. The chief aim is to assess the extent to which CXC examinations have successfully replaced colonial curricula and examinations.

I use this medium to formally request permission to use members of your staff as sources for data. Your institution has been chosen for inclusion in my sample because of your long history of involvement with both GCE and CXC examinations.

This study is necessary in light of recent focus on education systems in small states and the Caribbean's efforts to be independent of metropolitan examinations. The significance of this study rests on the fact that we should do honest assessment of CXC exams, to ensure that they meet international standards, cater to the needs of our people and adequately prepare graduates for the global world.

Data gathered will be used for academic purposes. All information will be treated confidentially. I would appreciate it if you could allow me access to your staff. If you have queries or questions regarding the research please feel free to contact me at  or email me at .

Thanks for your cooperation.

Yours truly

Erica Gordon

TEACHERS' QUESTIONNAIRE

I, Erica Gordon, am a student of the University of London, Institute of Education registered in the Phil/PhD programme. As part of my data collection for my research on the effectiveness of CXC in its efforts to replace colonial examinations in Jamaica, I am trying to ascertain teachers' views of the examinations. All information received will be used purely for academic purposes and will be held in strictest confidence. Your cooperation will be greatly appreciated. You do not have to write your names.

Instructions: Please place a tick beside all the answers which best indicate your views or write your response in the spaces provided.

Section A – Personal information

1. Sex Male () Female ()
2. Age 21 – 25 () 26 – 30 () 31 – 35 ()
 36 – 40 () 41 – 45 () over 45 ()
3. For how many years have you been teaching?
1 - 5 () 6 – 10 () 11 – 15 () 16 – 20 ()
21 – 25 () 26 – 30 () 31 – 35 () over 35 ()
4. For how many years have you been teaching at the examination level?
1 - 5 () 6 – 10 () 11 – 15 () 16 – 20 ()
21 – 25 () 26 – 30 () 31 – 35 () over 35 ()
5. Which subject or subjects do you teach? _____

6. For which examinations have you prepared students?

General Certificate of Education Ordinary Level (O Level) ()
General Certificate of Education Advanced Level (A Level) ()
Caribbean Secondary Education Certificate (CSEC) ()
Caribbean Advanced Proficiency Examinations (CAPE) ()
7. Which examinations did you sit at the secondary level?

General Certificate of Education Ordinary Level ()
General Certificate of Education Advanced Level ()
Caribbean Secondary Education Certificate ()
Caribbean Advanced Proficiency Examinations ()
8. Do you consider yourself qualified to prepared students for external /
summative examinations?

extremely () moderately () unsure () not at all ()

9. Were you prepared either by members within your institution, professional organizations or by the examining bodies to deliver content and assess students in the subject(s) that you teach?

adequately () moderately () not at all ()

Section B – The Examinations

10. What are your views on the breadth and depth of CSEC and CAPE syllabuses?

They are too extensive ()
They are adequate ()
They are inadequate ()
They require much more than the GCE O and A Level syllabuses ()
They require much less than the GCE O and A Level syllabuses ()
Other (please specify)

-
11. How relevant are CSEC and CAPE syllabuses to the lives of the students?

extremely ()
moderately ()
not at all ()
more relevant than O or A Levels ()
less relevant than O or A Levels ()

12. Are CSEC and CAPE syllabuses sufficiently Caribbeanized?

Yes () No () Unsure ()
More than GCE O and A Levels ()
Less than GCE O and A Levels ()

13. How useful are CSEC and CAPE syllabuses to prepare students for the examinations?

Extremely ()
Moderately ()
Not at all ()
More useful than GCE O or A Levels ()
Less useful than GCE O or A Levels ()

14. To what extent are the stated objectives of the syllabuses met in the assessment of CSEC and CAPE courses?

To a great extent. ()
To a lesser extent. ()
Not at all. ()
More than GCE O or A Levels ()
Less than GCE O or A Levels ()

15. What is the level of difficulty of CSEC and CAPE examinations?
- The examinations are too difficult. ()
 The examinations are too easy. ()
 The examinations are easier than GCE O and A Level examinations. ()
 The examinations are more difficult than GCE O and A Level examinations. ()
16. What are your views on the School Based Assessment component of the CSEC and CAPE examinations?
- It is very useful to assess learning outcomes. ()
 It requires too much time and effort from students. ()
 It ensures that students benefit from varied assessment methods. ()
 It gives students a better chance to be successful. ()
 It gives teachers extra, unnecessary work. ()
 It is useless. ()
 Other (please specify) _____

17. In your view, do qualifications obtained for the Caribbean Examinations Council (CXC) examinations measure up favourably to those obtained for international examinations such as GCE O and A Levels?
- Yes () No () Unsure ()
18. What is the success rate of students who sit CSEC and CAPE examinations?
- Excellent () Extremely good () Good ()
 Moderate () Poor () Extremely poor ()
- Better than GCE O and A Levels ()
 Worse than GCE O and A Levels ()
19. What recommendations could you make to CXC to improve its examinations and syllabi?
- _____

Section C – Impact of the Examinations on the Students

Instructions: Indicate your feelings towards the following statements on a scale of 1 to 5 where 1 indicates strong agreement and 5 indicates strong disagreement.

19. CSEC and CAPE syllabuses and Examinations encourage critical thinking among students.
- 1 () 2 () 3 () 4 () 5 ()

20. Students who take CSEC and CAPE examinations are given practical training in the subject areas.

1 () 2 () 3 () 4 () 5 ()

21. Students who take CSEC and CAPE examinations acquire relevant skills for the working world.

1 () 2 () 3 () 4 () 5 ()

22. CSEC and CAPE syllabuses encourage students to be good citizens who contribute to nation building.

1 () 2 () 3 () 4 () 5 ()

23. Self- respect and self-worth are developed among students who sit CSEC and CAPE examinations.

1 () 2 () 3 () 4 () 5 ()

24. Students who do CSEC and CAPE courses develop positive affective skills such as team work, consideration for others, and tolerance.

1 () 2 () 3 () 4 () 5 ()

25. Students who successfully complete CSEC and CAPE courses can effectively function in the global economy.

1 () 2 () 3 () 4 () 5 ()

Your comments on the format, structure, and ease of comprehension of the questionnaire will be greatly appreciated. Suggestions for improvement are welcomed.

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APPENDIX 6

METHODOLOGY MATRIX

**Problems, pressures and policies affecting the progress of the Caribbean Examinations Council Examinations:
A Postcolonial response to secondary education in Jamaica**

AIMS	RESEARCH QUESTIONS	DATA SOURCES	ISSUES OR LOCATION
1. To review the reasons for the replacement of colonial examinations by CXC examinations and the impact of these on their implementation	1. How far does the CXC reflect the tensions and pressures of modernisation through a neo-colonial legacy in a period of globalization?	World Bank and UNESCO Reports CXC reports Reports from regional bodies Government of Jamaica and the Ministry of Education	Chapters One and Two primarily, Three, and Four National and Regional push due to independence IMF conditionalities International donor agencies Globalization and its demands The need to be critical of data and information bearing in mind the genre and originator of the information
2. To assess the extent to which the Caribbean Examinations Council (CXC) examinations have successfully replaced colonial education and examinations	2. What are stakeholders' views regarding the extent to which CXC examinations have successfully replaced colonial examinations in Jamaica in terms of the requirements of national identity and preparation for globalization? 2a. How does the performance of the Caribbean Examinations Council compare with its objectives and mandate?	Reports from CXC Government Reports Independent Research Syllabi Census Data Teachers' Questionnaire Interviews with CXC Officials, Interviews with government official and key industry personnel Census data	Chapter Seven Presentation and Analysis of Data Researcher has to guard against bias and take into account extraneous variables that might present CXC in a glowing light when in fact the results may be telling a different story – for example, age cohorts, number of schools, percentage pass rates

	<p>2b. How far has a wider cross section of students been able to achieve qualifications through the CXC examining process?</p> <p>2c. To what degree have more students achieved success in CXC examinations compared with the Cambridge examinations?</p> <p>2d. How far do students who pursue CXC courses acquire the requisite skills for citizenship and nation building?</p>	<p>Teachers' Questionnaire and Interviews with tertiary educators</p> <p>Interviews with government officials, CXC officials and employers</p> <p>Teachers' questionnaire</p>	
	<p>2e. To what extent do CXC syllabi facilitate dynamic, contemporary teaching strategies and activities that help students to engage positively with the socio-economic issues that abound in the Jamaican society?</p> <p>2f. How far have students who sat the CXC examinations been</p>	<p>CXC Officials</p> <p>Teachers' Questionnaire</p> <p>Syllabi</p> <p>CXC Officials, Teachers,</p>	

	adequately prepared to function effectively in the global working environment?	Employers' and Govt. officials' interviews	
3. To explore the reasons for the current state of implementation of CXC examinations in Jamaica.	3. How might the CXC develop in light of these tensions and findings?	Interviews with four sets of stakeholders; Independent research, Newspaper Articles, Government Policy Documents, Teachers	Chapter 8 Conclusions and Implications Future Research Recommendations To be linked with the demands of globalization; evaluate how external and internal forces will drive the future development of CXC
	4. What tensions and contradictions have been played out in the implementation of CXC in the Jamaican context?	World Bank and UNESCO Reports CXC reports Reports from regional bodies Government of Jamaica and the Ministry of Education Interviews with four sets of stakeholders;	Chapters one and Two primarily, Three. National and Regional push due to independence IMF conditionalities International donor agencies Globalization and its demands The need to do critical discourse analysis bearing in mind the genre and originator of the information

APPENDIX 7

Sample letter that was attached to the pilot questionnaire sent via email on August 17, 2006. The respondent's and school's names have been changed to ensure anonymity and confidentiality.

Dear Maria

I have received permission from your principal to collect data from the staff of Sample High to assist with my research project. I am conducting research into the extent to which Caribbean Examinations Council (CXC) examinations have successfully replaced General Certificate of Education (GCE) examinations.

I am using you as part of my pilot group to test out the extent to which my questionnaire is effective. Your comments on the format, ease of understanding the instrument, any difficulties experienced, any aspect that you think could be included or excluded and overall views on the questionnaire will be greatly appreciated.

I would be grateful if you could return this within two weeks. If you would prefer to download and complete the hard copy that would also be acceptable. In that case, I will make arrangements to collect the questionnaire from you. Please let me know which procedure you will follow.

Thanks for your assistance and cooperation.

Erica

APPENDIX 8

Questions for semi-structured interviews with industry officials

1. How would you describe the calibre of recruits/employees that you have had since the country has embraced CXC exams whole scale?
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2. Would you say that recruits with CXC qualifications are better equipped to deal with the requirements of the job?
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3. To what extent are CXC graduates more equipped with immediately usable skills that the job necessitates?
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4. What are your views on the current performance of the Caribbean Examinations Council?
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5. Is there any correlation between subjects passed and the work that young recruits have to do?

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6. Do you think that the content of the courses done adequately prepares students for the real world of work?

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7. Are the recruits able to transfer their academic learning to the real life situations that they encounter on the job?

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8. How does your selection / recruiting mechanism account for the differences in the types and ranges of exams that students are allowed to sit?

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9. Do you give preferential treatment to recruits with selected qualification – for example HEART NTA, RSA, CXC, etc.?

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10. In your estimation, how effective has CXC been in inculcating national values and attitudes in its candidates?

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11. How would you assess the work ethic of employees with CXC qualifications?

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12. Would you say that employees with CXC qualifications are more nationalistic/patriotic than those who successfully sat British-based examinations?

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13. What recommendations, if any, would you make to CXC officials who design curricula and assessment tools?

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14. What are your views regarding the future development of the Caribbean Examinations Council?

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Letter with responses from an industry official

September 7, 2007

Ms. Erica Gordon
c/o Sam Sharpe Teachers' College
Granville P.O. Box 40
St. James

Dear Ms. Gordon

The following is in response to your questionnaire on the topic: *“Caribbean Examination Council (CXC) Examinations – Postcolonial Efforts to redesign Caribbean Secondary Examinations.”*

- (1) Mixed calibre of recruits employed.
- (2) To a certain extent some recruits with CXC qualifications carries a greater degree of efficiency to the job.
- (3) CXC graduates with information technology experience are in some cases more quicker to grasp some skills which make them easier to train.
- (4) Too many students are failing English.
- (5) Yes. Research is done at the library in all subject areas, therefore prior knowledge of the varying subject areas enable the staff to be better able to assist the users.
- (6) I am not familiar with the contents of the student coursework.
- (7) Yes. But mainly in the practical/vocational subjects, for example, Information Technology.
- (8) We are guided by rules and regulations that exist for employment in the government sector.
- (9) We recruit persons starting with the basic qualifications but consideration is also given to persons who have additional qualification and or experience in the area that employment is being sought.

Ms. Erica Gordon
c/o Sam Sharpe Teachers' College

- (10) It is difficult to judge how effective CXC is in calculating national values and attitudes.
- (11) Same as above. It is my personal belief that work ethics comes more from how the individual was socialized.
- (12) Cannot say.
- (13) Do not know enough about the process to offer any recommendations.
- (14) None.

Yours sincerely

[Name and title deleted for anonymity.]

APPENDIX 9

Interview schedule for tertiary level educators

1. How would you compare CXC recruits with their predecessors who sat British – based exams?
2. Do you still recruit students with British-based qualifications?
3. What are your views on the Caribbean Advanced Proficiency Examinations (CAPE)?
4. Is there a marked difference between current students' ability to make the transition from being a student at the secondary level to tertiary students?
5. How relevant are the CSEC and CAPE curricula to that which is required at the tertiary level?
6. What is your view of the range of subjects offered by CXC?
7. What is your assessment of recruits' ability to relate their secondary education to the environment and needs of society?
8. Do you think that the knowledge, attitude and skills of CXC graduates is superior to those which former students who sat the British-based examinations possessed?
9. What percentage of your intake has only CXC qualification?
10. What is the success rate of the students?
11. Is there a correlation between entry qualification and students' results?
12. If you could influence the CXC curricula what changes would you suggest?
13. What recommendations, if any, would you make to CXC regarding curricula and assessment?
14. What is your view of the current performance of CXC?
15. What do you think of the future development of CXC?

Completed interview schedule from tertiary educator, received via email

1. How would you compare CXC recruits with their predecessors who sat British – based exams? **Their performance is dependent on grade received.**
2. Do you still recruit students with British-based qualifications? **Yes**
3. What are your views on the Caribbean Advanced Proficiency Examinations (CAPE)? **I have not examined fully this examination so I have not views.**
4. Is there a marked difference between current students' ability to make the transition from being a student at the secondary level to tertiary students? **Most of our students are professionals so it is hard to respond.**
5. How relevant are the CSEC and CAPE curricula to that which is required at the tertiary level? **They are relevant in that CSEC and CAPE programmes are the foundations on which sound tertiary education is built. (Education makes you trainable and training makes you employable)**
6. What is your view of the range of subjects offered by CXC? **Ranges four and below should be deleted. They have no use.**
7. What is your assessment of recruits' ability to relate their secondary education to the environment and needs of society? **School leavers just do not have the ability to effectively transfer learning. They have to be taught self direction.**
8. Do you think that the knowledge, attitude and skills of CXC graduates are superior to those which former students who sat the British-based examinations possessed? **Not superior but CXC equips students to relate to experiences in the Caribbean and the wider world while GCE etc. confines students to British culture more so.**
9. What percentage of your intake has only CXC qualification? **80%**
10. What is the success rate of the students? **90% pass rate.**
11. Is there a correlation between entry qualification and students' results? **Yes, better CXC grades better performance.**
12. If you could influence the CXC curricula what changes would you suggest? **I would suggest more outcome based teaching and assessment. Students should be allowed to participate in more practical real life activities.**
13. What recommendations, if any, would you make to CXC regarding curricula and assessment? **See 12 above. Assessment should be done on a continuous basis and**

APPENDIX 10

Questions for semi structured interviews with Ministry of Education officials

1. Why did the Jamaican government mandate all schools to pursue CXC examinations?
2. Did the United Kingdom's decision to introduce GCSEs contribute to the move?
3. What were the cost implications of the decision?
4. To what extent were teachers adequately prepared to instruct students to master CXC exams?
5. New Secondary schools have been upgraded to high schools, how were these schools and teachers prepared to handle the CSEC curricula?
6. Would it be fair to say that recent harsh criticisms of students' poor performance at CXC exams are linked to or arise because of the performance of these newly upgraded schools?
7. Did the Jamaican government ever entered into negotiations with London or Cambridge Examinations Syndicate to have them localize the content of the syllabuses and hence the exams offered to us?
8. Recent comments by Robert Gregory highlight the disparity between the national goals and CXC exams. What are your views on this?
9. Do you think that the CXC exams are sufficiently Caribbean in their focus?
10. What are your views on the current performance of the CXC?
11. What, if any, are the affective learning outcomes that CXC curricula are expected to foster?
12. Do you think that CXC curricula can or do play a role in combating the effects of cultural penetration in Jamaica?
13. What are your views on the argument that CXC exams and or qualifications do not adequately prepare our students for further education whether locally or internationally?
14. Account for government's recent intervention strategy to improve CXC performance.
15. What was the government's rationale behind providing funding for students to sit 4 CXC exams?
16. What is your assessment of this initiative?

17. What are your views regarding the future development of CXC?
18. What recommendations, if any, would you make to CXC concerning syllabi and assessment?

Completed interview schedule, submitted via email from Ministry of Education official

1. **Why did the Jamaican government mandate all schools to pursue CXC examinations?** *It was felt that as a Region there was need to further affirm our independence and Nationhood by producing our own examination that would eliminate some of the cultural biases that were featured in the British examinations at times.*
2. **Did the United Kingdom's decision to introduce GCSEs contribute to the move?**
I am not able to comment on this.
3. **What were the cost implications of the decision?**
It meant that Governments in the Caribbean would have to jointly stand the cost of all the administration processes involved in formulating and implementing an examination.
4. **To what extent were teachers adequately prepared to instruct students to master CXC exams?**
This was done extensively. Firstly, the examination was piloted in 1976 in select schools and much training was done of teachers of the subjects piloted. One subject piloted was history.
5. **New Secondary schools have been upgraded to high schools, how were these schools and teachers prepared to handle the CSEC curricula?** *The CXC organizes regular workshops in the various disciplines to be examined and teachers are mandated to attend these. They are charged to ensure that information is cascaded to other members of staff in their schools. Texts are recommended and the requisite syllabi are made available.*
6. **Would it be fair to say that recent harsh criticisms of students' poor performance at CXC exams are linked to or arise because of the performance of these newly upgraded schools?** *No!!! The problem also presents itself in the traditional High schools.*
7. **Did the Jamaican government ever entered into negotiations with London or Cambridge Examinations Syndicate to have them localize the content of the syllabuses and hence the exams offered to us?** *I am unable to respond to this item*
8. **Recent comments by Robert Gregory highlight the disparity between the national goals and CXC exams. What are your views on this?** *There are large numbers of students who are marginalized by examinations because of their achievement levels in areas such as literacy and numeracy. Once provisions are made to manage this problem then goals will be synchronized.*
9. **Do you think that the CXC exams are sufficiently Caribbean in their focus?** *Undoubtedly.*

10. **What are your views on the current performance of the CXC?** *They have been doing quite well in the Region. Of course performance levels vary among the islands; which is indicative of the type of education product that is offered by each island.*
11. **What, if any, are the affective learning outcomes that CXC curricula are expected to foster?** *All three learning domains are targeted and certainly it is hoped that students matriculate for CAPE which facilitates enrolment in Tertiary level programmes.*
12. **Do you think that CXC curricula can or do play a role in combating the effects of cultural penetration in Jamaica?** *No*
13. **What are your views on the argument that CXC exams and or qualifications do not adequately prepare our students for further education whether locally or internationally?** *Absolute nonsense; there are many international universities which accept passes in that exam instead of SAT's for one.*
14. **Account for government's recent intervention strategy to improve CXC performance.** *The intervention sought to address the needs of those students who will benefit from competency based assessment.*
15. **What was the government's rationale behind providing funding for students to sit 4 CXC exams?** *To enhance access to the examinations for students whose financial circumstances would normally cause them to be excluded.*
16. **What is your assessment of this initiative?** *It has been assisting the target group well.*
17. **What are your views regarding the future development of CXC?** *The Syndicate is rather proactive and has been adjusting their offering as the needs of society dictates. It will always be relevant and a solution to our assessment needs.*
18. **What recommendations, if any, would you make to CXC concerning syllabi and assessment?** *None at this time.*

APPENDIX 11

Questions for semi structured interviews with CXC officials including The Chairman, Past Chairman, The Registrar, The Pro Registrar, The first Pro Registrar, Directors of the Overseas Offices, the initial architects, markers

1. What is the philosophy underpinning CXC examinations?
2. How would you compare CXC with metropolitan exams?
3. Do you think that the content required by the CSEC and CAPE syllabi is sufficiently “Caribbeanized”?
4. How do the prescribed curricula compare with what obtains on the international scene?
5. Can students who have completed CXC examinations readily adjust to what is required in tertiary institutions both locally and internationally?
6. How, if at all, do the CXC curricula aim at developing the affective learning skills of students?
7. Does the CXC play a role in addressing developmental and social issues in the curricula?
8. What role does CXC play in meeting the needs of Caribbean societies?
9. What is the value or / and importance of continuous assessment in CXC?
10. What is the rationale behind the foreign languages being offered?
11. Comment on the range of abilities tested and levels of subjects offered.
12. How far would it be true to say that CXC offers more breadth and depth than London and Cambridge exams?
13. What are your views on the current performance of CXC?
14. To what extent are the stated objectives of courses met in the exams?
15. How are these objectives measured?
16. The metropolitan examinations facilitate adult learners and school drop outs who try to gain qualifications in a year. These do not have to do continuous assessment. Does CXC have any plans to cater to these types of students?
17. To what extent do annual reports influence syllabi and examinations?

18. How does feedback from teachers influence the assessment process?
19. What, if any, would say are the strengths of CXC examinations?
20. What, if any, would say are the shortcomings and/or weaknesses of CXC examinations?
21. What are your views regarding the future development of CXC?

Transcript of Pro Registrar's interview

Interview conducted on April 23, 2007 by the researcher

1. What is the philosophy underpinning CXC examinations?

The philosophy was to provide assessment instruments that were accessible to the Caribbean especially the English-speaking Caribbean. The aim was to provide examinations of quality and relevance to life in the Caribbean. Provision was also to be made for mobility so that the qualifications can be used elsewhere in the global environment. Relevance is the key issue in the examinations. The content is grounded in the reality of the Caribbean and the wider international environment. Students must be able to function at home and abroad.

2. How would you compare CXC with metropolitan exams?

The Council has developed a model that Cambridge is using. Utilizing Schools Based Assessment is different through SBA we include teachers in the assessment process. This is quite desirable; teachers can capture some knowledge not included in the exams and help in the interpretation of students' work. CXC does assessment from various sources – the exams plus SBA. CXC compares favourably. Others are modelling CXC approaches. We have not only caught up with them but we have gone ahead of them. Quality has not suffered. We have had criticism that we are too vigorous and some students say that the examinations are very challenging.

3. Do you think that the content required by the CSEC and CAPE syllabi is sufficiently "Caribbeanized"?

Yes. Particularly Social Studies, Geography, Economics, Principles of Business and History.

4. How do the prescribed curricula compare with what obtains on the international scene?

Our curricula compare very favourably. CXC does curricula scrutiny elsewhere to see that ours are no lower in standard but at or above standard of others. Mobility of students to other international systems is also considered; we want to help to prepare students for transition.

5. Can students who have completed CXC examinations readily adjust to what is required in tertiary institutions both locally and internationally?

Undoubtedly. Students are sought after and are offered scholarships for US universities; this is testimony that we do well. Some students do not do well; governments do not provide enough resources for them to do so.

6. How, if at all, do the CXC curricula aim at developing the affective learning skills of students?

Much is taken into account. This is done in Social Studies and mainly through the methodologies that are used; students have to work together, give and take, cooperation is required. Students produce facts but must utilize various methods of mastering the content. Learning together is a very integral part. All domains are considered fully.

7. Does the CXC play a role in addressing developmental and social issues in the curricula?

Undoubtedly. They are not an end in themselves but a means to an end- development of the Caribbean region – Geography, Economics, Maths definitely development oriented; major pillar of experience for students, hence the value of involving teachers in assessment; feedback from them help to further development.

8. What role does CXC play in meeting the needs of Caribbean societies?

The curricula focus on various factors affecting the region to promote development. The Council meets annually but the sub-committees ensure contribution to regional development through addressing regional concerns. Syllabuses are reviewed and revised to capture the concerns.

9. What is the value or / and importance of continuous assessment in CXC?

Continuous assessment takes into account knowledge and skills that cannot be tested on paper and pencil test; this is important as it provides an accessible means of learning about students and their progress. It is not another syllabus as perceived by some. It is part of the natural process of learning. The assignments are set on core content; students practice research and writing skills. It is alleged that students get help with SBA but if there is no evidence, then the Council cannot say. The teachers are trained to conduct them; they exercise the element of control; they act as checks and balances. If there were dissonance between the SBA and exam, then that would testify to this.

10. What is the rationale behind the foreign languages being offered?

We live in a multi-lingual region; our neighbours mostly speak Spanish. Additionally we think of international travel. Some school may introduce other languages. We may look at Japanese due to their political presence and businesses in the region and also for the global environment.

11. Comment on the range of abilities tested and levels of subjects offered.

We have various competency levels. Our grades range from 1 – 5. Our examinations are criterion-referenced tests; they are not pass/fail tests unlike the GCE norm-referenced tests. The Basic Competency is on its way out. Only Maths has another year or two. More students are opting for the General Proficiency; Basic is under subscribed. Employers are not recognizing nor opting for Basic. The General Proficiency is more relevant to employers' needs. The Basic is losing currency. There has been a systematic study of acceptance in the region which revealed that it is not needed. We need to collect data to verify the acceptance level of the Technical Proficiency; however, from anecdotal reports the graduates with these subjects are securing jobs for which they are suitably qualified. We are introducing Caribbean Certificate of Secondary Level Competence (CCSLC), in response to the needs in the region. The vast majority of students are not succeeding in the exams but they have the required level of competence. The students have a wide choice of examinations, greater areas are covered and the subject areas are developed by respective governments so the needs of each territory are met. English and Math programmes have already been developed. The CCSLC is not as rigorous as CSEC but the students will be functional and can use their skills in the world of work; these qualifications are not for tertiary level studies; grades 1 to 3 at CSEC render students

eligible for tertiary studies. A receptionist for example, may not need CSEC Maths but the CCSLC may be just right.

12. How far would it be true to say that CXC offers more breadth and depth than London and Cambridge exams?

Yes, we do; hence the criticism about rigour and challenge. We maintain quality and cover wider area than traditional examinations. We focus on the immediate environment and community and the other areas; the other exams are more insular.

13. What are your views on the current performance of CXC?

All the governments agree that more of their students need to produce better results; most governments are taking it seriously for the survival of their countries.

14. To what extent are the stated objectives of courses met in the exams?

Students who master most of the objectives get better grades. In the technical and vocational areas the objectives are met by the majority of the students. In Maths and English they are not all met to the same extent. Humanities are in the middle of the success continuum. The objectives are not met to the degree of comfort in Maths and the Sciences. In the foreign languages the success rate is reasonably good.

15. How are these objectives measured?

The objectives are guidelines given to teachers and trustingly they follow them. There is a correlation between SBA and exam results. There are quality control mechanisms in place and we insist on their observance. Yes, the objectives are met hence some very excellent levels of achievement.

16. The metropolitan examinations facilitate adult learners and school drop outs who try to gain qualifications in a year. These do not have to do continuous assessment. Does CXC have any plans to cater to these types of students?

We do have alternative papers for students who are not in school. Some subjects do not require SBAs and for those students who are resitting, they can carry their SBA grades to the resit.

17. To what extent do annual reports influence syllabi and examinations?

The annual reports are sent to schools; the information is to help the teachers. Probably at the school level we could check the impact of the reports. The reports are sent to the schools for them to take action. The reports are also examined by the Syllabus Committee which assesses the students' performance and they take the decision whether or not to revise; they evaluate whether the curriculum is functioning, why students are not mastering and do surgery on the subject areas. If areas are poorly handled repeatedly, then it is indicative of the need for revision and the Council does so. The level of competence of teachers leads to poor performance. A significant number of teachers are not competent although CXC holds seminars with teachers. For the new secondary schools that were upgraded to high schools summer workshops via UWI are recommended. When I was at the Ministry of Education I lobbied for and got six week summer camps in Maths and the Sciences to prepare the teachers in the system for delivering CSEC. The teachers were trained up to and did exams to demonstrate competence at the N¹ Level [Year One in the Faculty of Natural Sciences]. Upgrading of teachers needs to be done. I am hurt sometimes at the level

of criticism levelled at some schools because some do well. Black River, for example, has more students doing well than Monroe and Hampton. Black River and St Elizabeth Technical High School (STETHS) are comparable numerically yet Black River does better. Black River is doing better than STETHS in some areas. [Black River is a new secondary school that has been upgraded to high school. The others are established grammar schools with a history of excellence.]

18. How does feedback from teachers influence the assessment process?

Evaluation forms are sent to the teachers from all schools to get direct feedback; the markers also give feedback and comments; it is a two-way flow. We are not happy with the number of responses from teachers. They do not see the importance of their input.

19. What, if any, would say are the strengths of CXC examinations?

Relevance of the content to the region

The participatory approach – teachers make an intervention in the assessment process
Acceptability and recognition by international agencies, quality enhances acceptance.

20. What, if any, would say are the shortcomings and/or weaknesses of CXC examinations?

It is perhaps fair to say that the process itself is pretty expensive; the movement of people from various areas is onerous; the exams were catering to a relatively small percentage of the population but the news exam, CCSLC is addressing that. More subjects should have an SBA component although teachers would object.

21. What are your views regarding the future development of CXC?

There are further challenges in the marketplace from online education; how exams are delivered will have to be re-examined; we need to consider an electronic mode despite using paper and pencil assessment. Education systems are trying to get specific information on student performance. We could also introduce a CXC exam at grade eight to achieve common standards across the region. We should also consider the feasibility of grade level exams across the region. When we introduced the Associate Degree, the community colleges did not like the competition. CXC is doing contemplation to see if we should stay at the secondary level instead of venturing to the tertiary level. CXC is going into the schools to help teachers. Governments can contract the services of CXC to help to do workshops in schools. CXC has pretty much covered most of the islands. Suriname (Dutch) have asked for associate membership. We have done some workshops in St Martin. If we adopt the electronic mode we could facilitate the diaspora.

Responses to Questions for semi structured interviews with CXC official – former Pro Registrar

1. What is the philosophy underpinning CXC examinations?

The Agreement establishing the Caribbean Examinations Council came into force on April 29, 1972 and empowered the Council “to develop and conduct such examinations as it may think appropriate and award certificates and diplomas on the results of the examinations so conducted”

Resolution from the 1973 Conference of Caribbean Ministers of Education:

Conscious of the need for the institution of a new System of examinations for the region;

Recognizing that such a system should be in keeping with the educational goals of the Governments of the region:

Resolves that the Caribbean Examinations council should be advised to introduce urgent measures with a view to assuming as early as possible, the full responsibility assigned to it for providing, setting, marking and scoring examinations suited to the needs of the Caribbean societies and relevant to the goals of participating Governments

2. How would you compare CXC with metropolitan exams?

The Council was directed to develop school leaving examinations to be taken after five years of secondary schooling to replace the GCE ‘O’ level. Comparability with the standards of the British examinations was assured by the use of British ‘O’ level Chief examiners as CXC external Moderators during the first decade.

3. Do you think that the content required by the CSEC and CAPE syllabi is sufficiently “Caribbeanized”?

“ The compelling argument to break loose from Cambridge was the desire for syllabuses with a Caribbean content where possible and where not as in Mathematics for ways in which the tests might take account of cultural factors” (Augier & Irvine 1998)

4. How do the prescribed curricula compare with what obtains on the international scene?

CXC examinations are accepted worldwide as the equivalent to the British GCSE “O’ examinations

5. Can students who have completed CXC examinations readily adjust to what is required in tertiary institutions both locally and internationally?

The examinations are criterion- referenced. Where students obtained the grades indicated as satisfactory performance, yes.

6. How, if at all, does the CXC curricula aim at developing the affective learning skills of students?

CXC provides a syllabus. Individual territories provide the curriculum.

7. Does the CXC play a role in addressing developmental and social issues in the curricula?

See response to question 6

8. What role does CXC play in meeting the needs of Caribbean societies?

CXC is an Examination Board. It responds to needs as directed by participating governments through the representation on the Council, the Schools Examinations Committee and Syllabus Development Panels.

9. What is the value or / and importance of continuous assessment in CXC?

School-based assessment is an integral part of the Council's testing policy. It provides an opportunity for teachers to participate in the assessment of the syllabus and offers students under the guidance of teachers to earn marks towards their final grades.

10. What is the rationale behind the foreign languages being offered?

The region is multi-lingual with English, Spanish and French widely spoken. Spanish is the second language of many English-speaking Caribbean country. Trinidad and Tobago once a French territory and St. Lucia, and Dominica have language ties to the French speaking Guadeloupe and Martinique.

11. Comment on the range of abilities tested and levels of subjects offered.

The CSEC is taken at the end of five years of secondary schooling: CAPE is offered in 2 units. Unit 1 may be taken at the end of the sixth year and Unit 2 at the end of the 7th year

12. How far would it be true to say that CXC offers more breadth and depth than London and Cambridge exams?

A comparison between the respective syllabuses would provide the information required

13. What are your views on the current performance of CXC?

I am not able to assess the performance as I've been out of the system for the last eight years.

14. To what extent are the stated objectives of courses met in the exams?

I cannot speak to the current state of the examinations

15. How are these objectives measured?

The Council uses a range of testing techniques viz; objective (multiple-choice) items. Free response, essay, practical tests, and laboratory tests

16. The metropolitan examinations facilitate adult learners and school drop outs who try to gain qualifications in a year. These do not have to do continuous assessment. Does CXC have any plans to cater to these types of students?

CXC offers examinations to private out of school candidates.

17. To what extent do annual reports influence syllabi and examinations?

Examiners reports, comments from subject groups are sent to the panels of paper setting examiners for consideration and action

18. How does feedback from teachers influence the assessment process?

Comments are considered by the relevant Council Committees and action taken as deemed desirable

19. What, if any, would say are the strengths of CXC examinations?

The objectives are clearly set out in the syllabuses and are available to teachers students and parents ;the range of assessment techniques used; the inclusion of school-based assessment .the wide participation of teachers in syllabus design and in marking examination papers; the involvement of professional educators from the tertiary level and the, Ministries of Education

20. What, if any, would say are the shortcomings and/or weaknesses of CXC examinations?

Over-dependence of territories on CXC in curriculum related matters.

21. What are your views regarding the future development of CXC?

Its future is assured provided it continues to be responsive to the needs of the region as indicted by participating territories.

APPENDIX 12

Excerpts from CXC subject reports

CAPE Literatures in English May/June 2003

“...Candidates showed competence in answering questions on the Prose module but were not proficient on the Drama and Poetry modules... This year, just as in 2002, the candidates did not seem to have been properly prepared for the examination. It was clear that in too many instances the syllabus was not being interpreted carefully enough. While several examples from the Internal Assessments gave the most graphic evidence of this problem, the responses to the other two papers also indicated that the genre-based nature of the syllabus is not being emphasized..... More consistent and creative work needs to be done in the teaching of poetry” (p.2).

“... This question requiring inference and analysis on one of the most basic poetic techniques – comparison between two essentially unlike concepts or objects – was not as satisfactorily answered as examiners would have expected” (p.3).

“Again, they often failed to show sufficient knowledge of the genre” (p.5).

“It was surprising to note that the same poems were being used in the candidates’ responses as if only a few poems of the selection were being taught” (p. 5).

“More emphasis needs to be given to the vocabulary and concepts associated with the various genres” (p.5.)

CAPE Sociology May/June 2003

“In Part (a) the answer was satisfactory, that is colour or race” (p. 4)

“This was a question on some very basic concepts in social stratification and in sociology generally. A substantial number of candidates was unable to distinguish between sex and gender, race and ethnicity, caste and class” (p.4).

“There is need for some critical analysis when studying these groups” (p. 5).

“The Internal Assessment on both units was generally well done. Both teachers and students should be commended. There was evidence of research and the presentation was good in most instances. There is need, however, for more guidance from teachers in the choice of topics, since some topics chosen were not appropriate. In most cases, the teachers’ marks were not altered significantly” (p .9).

English A June 2005

“ Teachers need to emphasize that CXC English A ... is an English language examination and that candidates must, above all, demonstrate competence in and control of the English language” (p.3).

“Performance on question 1 this year was worse than last year. There are still too many candidates who pay absolutely no attention to the word limit given” (p.4).

“Teachers should encourage candidates to over-indulge in the expression of literary devices” (p.7).

“It is noticeable where candidates have been ‘taught’ how to organize their points in paragraphs.... This kind of slavish reproduction should not be encouraged” (p. 7).

“The format of the presentation lent itself to better summarising and there was consequently a much higher average achieved on this question than in previous years” (p.8).

APPENDIX 13

C. E. Beeby's categorization of schools as reported by Jervier (1997):

Stage 1 – Dame Schools

At this stage, the teachers are ill-educated and untrained. The system is unorganized, the content narrow and the standard low. Reading, writing and arithmetic are stressed and memorizing is important.

Stage 2 – Formalism

Here rigid syllabi and methods are pursued. There is only one textbook and one way of operation. External examinations and inspection are special features. The emotional life of the student is ignored.

Stage 3 – Transition

At this stage, teachers are better educated and trained and there is a great gap between teachers' and students' knowledge. Final examinations restrict experimentation.

Stage 4 – Stage of Meaning

Common features of this stage are: there are well-educated and trained teachers, meaning and understanding are stressed. There is a wide curriculum with varied content and methods; problem solving and creativity are encouraged. There is a close relationship between the school and the community and attention is paid to pupils' emotional, aesthetic and intellectual life. Discipline is relaxed and positive while school accommodation is very good.

Appendix 14

Table showing extract from transcribed tabulated data from interviews conducted, colour coding of themes that emerged and screen shots of the tables as manually transcribed

Respondents	Question 4	Question 5	Question 6	Question 7
TE1	GCE O'Level no significant difference	The content is relevant given the nature of the subject matter in the specializations – Accounting, POB, Clothing and Textiles & Design, TD for example	CXC has a good coverage of the secondary curriculum.	They can relate their sec. ed. to the needs of society since schools' curriculum is aligned to the requirement to entry level jobs...
TE4	empirical data not available	The CXC and CAPE subjects are relevant for tertiary preparation.	Range is satisfactory but as we assess needs of society we might want to add subjects eg child care and other practical courses in preparation for career choices	Transfer of knowledge is a concern.
TE3	Unable to make judgement	Not required for nursing	Offers what is necessary to nursing programmes	Not studied
TE2	Most of our students are professionals so it is hard to respond.	They are relevant in that CSEC and CAPE are the foundations on which sound tertiary education is built. Education makes you trainable, makes you employable	Ranges 4 and below should be deleted. They have no use.	School leavers just do not have the ability to effectively transfer learning. They have to be taught self-direction.
TE5	Transfer to CAPE Mainly better than CXC to CAPE bridges the gap	CAPE very relevant; helps students to bridge the gap	Not sure of all areas but does offer all for the courses needed; adequate	Many students are unsure of what they want ... at tertiary they find they don't have requisite subjects... have irrelevant subjects

Philosophy Underpinning CXC	Compare CXC with metropolitan	Content sufficiently Caribbeanized?	Compat curricula to requirements in tertiary locally + intl.
Eng B 1 PD Don't know	NR	Lang + Lit yes, room 4 improvement SC relevant Room - lang teachers should b conscious in preparing student activities.	NR
2 GB Mc Mark CXC + CAPE Comm Studies	Students to produce from theory and be able to apply CAPE more culturally specific than GCE Continuity from CSEC - SBA component, CAPE allows for more creativity, self expression, personalized.	Yes - More so Comm Studies - Langs. in the Carib.	Eng Lang GCE + CSEC CXC more comprehensive More skills, broader range. Both exams test similar skill eg comprehension
MPS L McP A levels GCE 10 yrs. CAPE more culturally friendly, culture less culturally student preparation exam. A levels no SBA so students performed well but not in exams. Students pass but gaps in learning when they go to uni. CXC more global skill acquisition CXC coverage wider.	CXC more balanced coverage + doesn't assess specific learning outcomes, assessed 2 domains GCE more global skill acquisition CXC coverage wider.	Still global but Carib focus GCE does everything else that GCE does but also focuses on the Carib	

Tertiary Institutions

	1	2	3
Technology + Business + Voc	They are really no different	Yes CXC 1, 2, or 3 GCE A B or C	There is no data on this one.
Private Christian	Do not have empirical data but individuals speak of personal preference approx 40% feel that GCE candidates were better prepared 40% feel CXC better " + showed more depth - 20% could not decide	GCE + CXC ABC 1 2 3	Students performing well 80% of those entering have 5 or more subjects
(missing)	No basis for judgement - no study done	Yes	Insufficient evidence
Tech	Their performance is dependent on grade received	Yes	I have not examined fully this examination so I have no views
	NR?	Reinist all types Mainly CXC but some have 1/2 at GCE	Students do very well - compare across the island
Qualifications → Tertiary / Local + International	Level of performance Adequacy of preparation Relevance of Content	→ at tertiary level Correlation	Overall Assessment

Names of individuals and institutions have been blocked out to ensure confidentiality.