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Gauging Stakeholders Perceptions on Policy Shifts in the Financing of Tertiary Education at the University of the West Indies - Cave Hill Campus, Barbados.

Thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Education

MAY 2019

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ABSTRACT

My study sought to gauge stakeholders' perceptions of policy shifts in the financing of tertiary education at the University of the West Indies - Cave Hill Campus, Barbados. The financing of tertiary education in Barbados has been borne by the government since 1966 with zero cost to the student. In September 2014, the government of Barbados introduced a 20% tuition fee paid by the student with the government paying the remaining 80% of the economic cost. The study employed individual and focus group interviews to determine the perceptions of the various categories of stakeholders on financing tertiary education at the University of the West Indies (UWI) Barbados. The research also documented the views of the stakeholders on alternative models of financing tertiary education for the university. The findings indicate that the stakeholders felt that the public financing of tertiary education resulted in the political, social and national development of the country while it also contributed to the increase in public expenditure. In response to the change in public funding, the participants felt that the new model could reduce the public expenditure but it could also have the potential to reduce the access to persons from the lower socio-economic strata. The stakeholders suggested alternative models with the mixed model of financing being the one most supported. Finally, based on the data emerging from the study, there is a need for a larger and more detailed evaluation of the current model of financing tertiary education because of its impact on access, sustainable financing for tertiary education and further research.

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ABBREVIATIONS AND ACRONYMS USED IN THE THESIS

Abbreviations	Meaning	
BDS	Barbados Dollars	
BCC	Barbados Community College	
BVTV	Barbados Vocational Training Board	
CSME	Caribbean Single Market and Economy	
ECLAC	The Economic Commission for Latin	
	America and the Caribbean	
ETTC	Erdiston Teachers' Training College	
GATE	Government Assistance for Tertiary	
	Education	
GDP	Gross Domestic Product	
METI	Ministry of Education, Science,	
	Technology and Innovation	
METVT	Ministry of Education Technological and	
	Vocational Training	
MOE	Ministry of Education	
OECD Organisation for Economic Co-op		
	and Development	
OFL	Open and Flexible Learning	
SJPP/ SJPI	Samuel Jackman Prescod Polytechnic	
	Samuel Jackman Institute of Technology	
SRLS	Student Revolving Loan Scheme	
UWI	University of The West Indies	
UNDP	United Nations Development Programme	
UNESCO	United Nations Scientific and Cultural	
	Organisation	

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CHAPTER 1 INTRODUCTION

1.1 Context of the Research Study

Presently, Barbados, like most countries, is in the throes of an economic crisis, which has sparked many debates on the sustainability of its model of universal free education. As would be expected, there has been a lot of discussion on the proposed policy shift that introduces tuition fees on all university students. The news media, politicians, church leaders and members of the public have all entered the debate, making suggestions about how they think the government could sustain its funding of tertiary education, being offered at the university level. In light of this discussion, this study sought to canvass the views of stakeholders on the perceived challenges associated with the new funding model and proposals for alternative models of funding tertiary education at the university.

"Over the past four decades, Barbados has made significant economic and social progress. It is now regarded as an upper-middle-income developing country by the World Bank and is ranked thirty-seventh by the United Nations Development Programme according to the Human Development Index. One of the principal factors in Barbados' enviable ranking on the Human Development Index relates to its educational policies, practices and strategies" (The Economic Commission for Latin America and the Caribbean, ECLAC 2001, p. vii).

"Barbadian governments have long emphasised that education is a necessary condition for self-sufficiency and individual dignity. Moreover, the Barbadian experience has proven that education has immense power to transform the human condition and contribute to economic growth and development" (MEHRD 2012, p. 12). In fact, ECLAC, (2001, p. 70) argues "that education has been used as the key vehicle to increase national and individual incomes and bring about economic growth".

ECLAC, (2001, p. ix-x) proffer that successive "Barbadian governments have all stressed the importance of education to social and economic development as

evidenced by the consistently high proportion of national expenditure accorded to the sector. The post-independence period has seen important policy initiatives at all levels of education – from early childhood through to technical/vocational and tertiary. At the tertiary level and in technical/vocational institutions, the emphasis has been placed on increasing access to educational programmes that are more relevant to the emerging needs of the developing society".

The education provided in Barbados "has been identified as a major source for social change and modernisation of attitudes, values, and economic behaviour. Evidence of the success of the Barbadian education system can be seen in the demand for educated Barbadians to work abroad in every sphere of the world of work" (ECLAC, 2001, p. 71). In fact, "Barbados has maintained a thriving export of its human resource. What is significant about this phenomenon is that a small island such as Barbados, with a relatively small population, has not suffered a 'brain drain effect' that accompanies large population outflows as in many other countries. The high standard of education has ensured that even with population outflows, Barbados is still replete with well-educated individuals who can adequately service the country's needs" (ECLAC, 2001, p. 71)

According to the Ministry of Education and Sports (MES) Strategic plan 2002-2012, "underpinning the support systems are the premise that every Barbadian has the right to educational opportunities to allow for the full realisation of his/her potential. Presently, education in Barbados is compulsory by law between ages 5 to 16" (p. 11) Indeed, Barbados boasts of being "one of the countries in the world where education is free up to and including the tertiary level for all of its nationals" (MES, 2002-2012, p. 7).

1.2 Social Stratification in Barbados

"Before 1960, the Barbadian society consisted of a small merchant-planter elite predominantly, of European ancestry; a slightly larger class of accountants, lawyers, medical personnel, journalists and teachers of diverse ancestry, and a huge lower class of field workers and domestic servants primarily of African ancestry" (Worrell 1996)

p. 4). Since 1966, the post-independence era, the majority of the population has moved from dire poverty to attain a decent living standard. Worrell, (1996, p. 4) states that "the lower class has all but disappeared, and in its place, there is now a hugely strong and vocal middle class, that encompasses everything from skilled blue-collar workers who are employed in manufacturing firms and hotels, to a wide range of white-collar professional and managerial occupational groups, employed directly or indirectly in the manufacturing and tourism sectors". According to Worrell (1996), this economic progress was due to a number of factors; firstly, improved education, which enabled the workers' large-scale move upwards into the middle class; secondly, the foreign investment which introduced tourism and manufacturing; thirdly, the popularization of mortgages and consumer credit; fourthly, slow population growth which moderated the expansion in the labour force; and fifthly, the immigration of skilled people to fill crucial gaps in the labour force.

However, an examination of the social stratification in Barbados by (Beckles, 2007; Browne, 2011), reveals an elite class, similar to a caste system. The members of this elite class are defined as a result of their race. Next, there is a middle class which is stratified into the upper-middle, middle and lower-middle. This description is because of the level of education gained and earning capacity of Barbadians. Finally, there is a small group described as working class. Members of this group have a low or no degree of certification. It must be stated that movement within the middle and working classes is possible; however, this is not so for the elite class. This is because the middle and working classes are defined in terms of earning capacity and earning capacity is guaranteed from certification at the tertiary level.

Universal free education has been at the forefront of the transformation of the Barbadian economy and society. This policy has largely been the driving force in transforming Barbados from an agriculturally based economy dependent on sugar to an upper-middle-income service-oriented country, dependent on tourism, financial services and manufacturing. Due to the policy of free tertiary education, many Barbadians have been able to move from low-paying jobs and low-income homes to higher-paying jobs, and more comfortable places of abode. Trow (1974, p. 19) argues "that government policy followed social demand for higher education and not deliberate government policy driving the expansion of higher education". The

government of Barbados in the (1965-68) Development Plan stated the policy on that education was based on the premise education was the vehicle through which citizens would be able to make a contribution to "the social and economic growth of the society"; this was a stated policy by the political directorate at the time. Moreover, through access to free tertiary education, Barbadians have been able to increase their future earnings through the attainment of degrees. However, the prevailing economic circumstances characterised by high budget deficits, dwindling foreign reserves, and a slump in tourism which is the backbone of the Barbadian economy have conjoined to affect this previous tremendous thrust. The government has proposed significant shifts in financing education policy with the introduction of direct fees on university students from September 2014. How this is likely to impact on the level of highly valued human capital in the country remains unknown. Furthermore, the perceptions of stakeholders have never been sought, nor investigated so far.

1.3 Purpose of the study

This research sought to document the perceptions of the various categories of stakeholders; the students and their parents, the policymakers, the university administrators and an informed education specialist on the government's decision to introduce tuition fees on university students. The stakeholders were also asked to recommend financing models that in their opinion can be used to fund tertiary education for the university education sub-sector in the country.

1.4 Background and Rationale

The transformation of the Barbadian economy and society from an agrarian entity to a modern, human capital, the service-driven economy has been occasioned, in large measure, by the intensive public investment of government in the quality of its people through free education from primary to tertiary. This ostentatious practice has been credited with the rising number of families who have moved up the socio-economic ladder from poor households to the stable middle class and upper-middle-class families and individuals.

As one who can now be characterised as a middle-income earner, I can identify with the aforementioned sentiments since I was the beneficiary of the policy of free tertiary education. My family lineage was like that of so many Barbadians who previously were part of the working poor. I am the second of four children from a working-class background. My mother was a domestic worker and my father was a labourer. My father died when I was twelve years old leaving my very young brother and sister to be raised by my mother. At that time the policy of universal free education had just been instituted and as a result, I became a beneficiary. Unlike at present where there are no tuition fees and textbooks are subsidised, my mother had to purchase all the textbooks that I needed.

My first access to tertiary level education was when I attended the Erdiston Teachers Training College where I obtained my teaching certificate. As a trained teacher, my climb up the social stratification ladder began as I was able to earn a salary which pushed me into the middle class. The climb did not stop there as I was able to complete a Bachelor's of Science Degree at the University of the West Indies, again as a result of the access to free tertiary education. The possession of this qualification increased my level of income and pushed me further up the social stratification ladder. Consequently, I became a middle-income earner. All of these qualifications were obtained through the system of free education provided by the Barbados government.

However, my passion for learning did not stop at the Bachelor's level, I continued my education and read for a Master's Degree from the University of Leicester and now I am enrolled in the Doctor of Education (EdD.) Caribbean programme with the University of Sheffield. Let me also state that the qualifications which, I have obtained have catapulted me professionally. I was promoted from being a classroom teacher to a Senior Teacher, to a Principal and then to the Deputy Chief Education Officer and now to the post of Chief Education Officer in the Ministry of Education, Technological and Vocational Training. Therefore, I felt compelled to undertake this study to document the impact of the policy change of tuition fees for University students, especially the less affluent students and to record the alternative models as suggested by the stakeholders.

1.5 Barbadian Tertiary Education Landscape

The public tertiary education landscape in Barbados encompasses the University of the West Indies (UWI Cave Hill and Open Campus), Barbados Community College (BCC), Erdiston Teachers' Training College (ETTC) and the Samuel Jackman Prescod Polytechnic (SJPP) now the Samuel Jackman Prescod Institute of Technology (SJPI). These four institutions have differences in domain definition.

The public tertiary education landscape for the academic year 2017- 2018 is captured in Table1. It outlines the student enrolment, the expenditure by the state on each institution and the expenditure per student at these institutions.

Table 1: Public Tertiary Education Landscape 2017 – 2018

Institution	Enrolment	Expenditure	Expenditure
		(expressed in BDS)	per Student
University of The	5161	\$ 71,300,000.00	\$13,815.74
West Indies (UWI)	3101	ψ /1,500,000.00	Ψ13,013.71
Barbados			
Community College	3088	\$ 30,884,450.00	\$10,001.44
(BCC)			
Erdiston Teachers			
Training College	426	\$ 6,145,032	\$14,424.96
(ETTC)			
Samuel Jackman			
Prescod Institute of	1659	\$ 13,722,730.00	\$8,271.69
Technology (SJPI)			

Source: Ministry of Education, Technological and Vocational Training, Planning Unit (2019).

According to the Ministry of Education and Human Resources Development (MEHRD 2012, pp. 12-13)

when Barbados sought to reduce financial dependence on the export of sugar as its main foreign earner, tourism was promoted as the best alternative. The prosperity and sustainability of the tourism industry depended in large measure on having competent personnel at the service and managerial levels. With the assistance of the Canadian Technical Aid Programme and a joint effort by the Tourist Board and Barbados Hotels Association, a plan was implemented to train workers over a three-year period. This education and training assured the creation of a skilled human resource to meet the needs of the fledgling industry.

However, Government soon recognized "the need to go beyond technical skills training and to promote broad-based higher education options in Pure and Applied Sciences, the Humanities, Social Sciences, and Law" (MEHRD, 2012, p. 13).

1.5.1 The University of the West Indies (UWI)

As a result, in 1963 The University of the West Indies (UWI) College of Arts was established and was expanded at Cave Hill in 1967. This was made possible through a grant contribution of Bds \$1,920,000 from the British Government. The Barbados Government provided the land and financed the operational budget.

"Since then, the Government of Barbados has financed tertiary education for Barbadians enrolled at the UWI. The growth of this investment intuition has been spectacular" (MEHRD, 2012, p.13). The UWI has billed the government for student tuition as follows: Bds.\$72,000,000 in 2007-08, Bds.\$128,623,957.00 in 2008-09, Bds.\$128,000,000 in 2009-10. Bds.\$1378,000,000.00 in 2010-11, Bds.\$126,000,000.00 in 2011-12. Bds.\$123,000,000.00 in 2012-13, 2013-14, Bds.\$139,000,000.00 in Bds.\$96,300,000.00 2014-15 and Bds.\$93,871,162.00 in 2015-16 (Accountant General Reports 2007-2015).

Indeed, between 2007 and 2010, as the student population doubled, the government's expenditure on UWI also increased to a record high in 2013-14. MEHRD (2012 p. 16) suggests "that the financial provision for the tertiary sector has been a cost-intensive undertaking". For example, between 2007 and 2008; and 2013 and2014, public expenditure in the sector rose from Bds. \$75m. to Bds. \$139.4m. According to the Ministry of Education and Human Resource Development Estimates of Expenditure (2011-12, p. 254), "additional funds were made available for National

Development Scholarships which were re-introduced in order to provide training in priority areas".

"This major financial investment in tertiary education has enabled Barbados to make significant advancements in regional and international affairs" (MEHRD, 2012, p. 14). A recent UWI Cave Hill Tracer Survey (2018, p.1) "showed that over 82.2% of Cave Hill graduates from the 2014 cohort have found jobs within a year of graduation". The results also revealed that private sector employment of Barbadian graduates showed an increase from 49.9% in 2011 to 54.4% in 2016. This was possible, according to the Tracer Survey (2008), because persons with tertiary education are more marketable and perform better on the job market. I will now look at the history of the other tertiary education institutions.

1.5.2 Erdiston Teachers' Training College (ETTC)

The Erdiston Teachers' Training College (ETTC), located in Pine Hill, St. Michael, Barbados, "opened in 1948 It offered a one-year training course in Education which included English, Mathematics, Social Studies, Religious Knowledge, Health, Physical Education, Music, Home Economics, Woodwork, Gardening, Visual Aids and Art" (MEHRD, 2012, p. 13).

By 1990, ETTC had successfully achieved its original goal of providing training to the island's teachers and the mandate was extended to include continuing professional education. Furthermore, the College widened its focus to train secondary non-graduate teachers in Technical subjects such as Agricultural Science, Business Education, Home Economics and Industrial Arts.

Erdiston College has undergone significant reforms in its pedagogy since its inception, but Government's finance for the institution and for teachers enrolled has remained constant. "Teachers in the system who do not possess a Bachelor's degree to undertake a course of training for two years, with paid leave. The government also sponsors the one-year Diploma in Education for graduate teachers, and the Certificate in Educational Management and Administration at the School of Education for all qualified teachers of not less than three (3) years' experience" (MEHRD, 2012, p. 13).

In September 2016, ETTC registered students in the institution's first-degree programme: The Bachelor of Education (Mindbloom, 2017).

1.5.3 The Samuel Jackman Prescod Polytechnic (SJPP)

The Samuel Jackman Prescod Polytechnic (SJPP) was "officially opened in January 1970 with a mandate to develop skills in occupational competencies up to the level of skilled craftsmen" (MEHRD, 2012, p. 14). MEHRD (2012) states that "the new Polytechnic was opened and housed expanded full-time course offerings in Home Economics, Clothing Craft, Cosmetology, Industrial Sewing Machines and Garment Making formed the Division of Human Ecology. Since then the SJPP has expanded its programme offerings in both full- time courses and part-time evening courses. Course offerings include such areas as Business Law; Small Business Management, Child Care and Nursery Management, Care of the Older Adult and Electrical Installation. In an attempt to keep pace with developments in the virtual arena of online study, the Open and Flexible Learning Centre (OFLC) of the SJPP were created" (p. 14). In 2017, the institution was renamed the Samuel Jackman Prescod Institute of Technology (Mindbloom, 2017).

1.5.4 The Barbados Community College (BCC)

The Barbados Community College (BCC) is "a tertiary level institution, established by an Act of Parliament – the Barbados Community College Act, 1968-23. The Act was amended in 1990 to empower the College to grant Bachelor Degrees, Associate Degrees, Diplomas and certificates, to students who successfully complete approved programmes of study. The Act made provision for the institution to offer education and training in the following areas: Agriculture, Fine Arts, Science, Commerce, Liberal Arts, and Technology" (MEHRD, 2012, p. 15)

.

Additionally, MEHRD (2012) stated that "The Barbados Community College (BCC) was established to improve training in a wide range of skills at the technical, paraprofessional, middle-management and pre-university levels. The courses of study are of two years' duration. In addition, the Hotel School which was a sub-unit of the BCC was officially opened as the PomMarine Hospitality Institute in February 1997 at its present site in Hastings, Christ Church" (p. 15).

1.6 The University of the West Indies, Cave Hill Campus: Enrolment and funding Trends

Since its inception in 1963, the University of the West Indies, Cave Hill Campus has seen a steady increase in its enrolment of students at the undergraduate and graduate levels. For example, in 1999 there were approximately 3,568 undergraduate students at the Cave Hill Campus. However, between 2003 and 2004, the Cave Hill Campus began a major expansion in terms of the number of students and the amenities offered. Consequently, by 2007 the enrolment at Cave Hill Campus had increased to 6,718 students. Currently, the enrolment of undergraduate students stands at 4,455. See Figure 1.

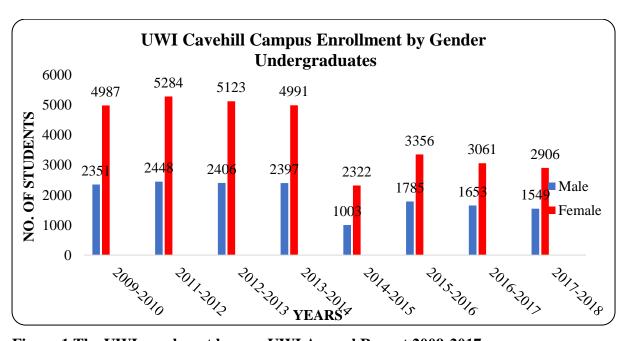


Figure 1 The UWI enrolment by sex; UWI Annual Report 2009-2017

"The expansion has meant major increases in the Government of Barbados' contribution to UWI. For example, in 2007, the financial contribution of the Barbados government to UWI Cave Hill Campus was Bds. \$72.3m. This figure represented Bds.28.3m over the Bds. \$51m required in 1999. However, between 2008 and 2009 the annual contribution required from the Government of Barbados increased from Bds.\$72.3 m to Bds.\$ 128.6 m" (Accountant General Report 2008-2009, p.62).

To put things in perspective, this data suggests that for the entire period 1999 to 2007 combined, the total contribution required, compared to Bds. \$714.6 m required for the 2007 to 2012 period. (*Accountant General Reports 2008-2018*). See Table 2.

Table 2: Funding for Tertiary Institutions (expressed in Barbados dollars)

YEAR	UWI	ETTC	SJPP	BCC
2016-2017	116.300m	6.056m	14.413m	28.370m
2015-2016	93.871m	5.968m	12.521m	27.906m
2014-2015	96.300m	4.139m	12.549m	19.753m
2013-2014	139.401m	4.210m	12.792m	25.990m
2012-2013	123m	5.363m	11.956m	24.106m
2011-2012	126m	4.048m	14.365m	29.800m
2010-2011	137m	4.389m	10.872m	27.956m
2009-2010	128m	4.744m	15.867m	23.942m
2008-2009	128.623m	3.892m	13.360m	30.816m
2007-2008	72m	2.923m	10.058m	25.408m
2006-2007	60m	3.080m	11.109m	24.883m

Source: Accountant General Reports 2008-2018

The "stark reality is that since around 2006 or so, the total contribution by the Government of Barbados to UWI has exceeded the combined contribution to Barbados Community College, the Samuel Jackman Prescod Polytechnic and Erdiston Teachers' College" (Sinckler,2013, pp.79-80.). See Table 2. Therefore, it was not surprising that the Barbados government re-examined its practice of fully financing a university education.

1.7 Registration and Amenities Fees Paid by Students at Various Tertiary Education Institutions in Barbados

Before September 2014, fees paid by students at the tertiary level were for non-instructional services such as registration, student guild fees, campus transportation and student health care insurance.

At Erdiston Teachers' Training College, "teachers in the system undertake a course of training for two years, with paid leave. (MEHRD, 2012, p. 13). Students pay registration fees only.

The Barbados Community College (BCC) provides "training in a wide range of skills at the technical, para-professional, middle-management and pre-university levels" (MEHRD, 2012, p. 15) delivering two-year associate degrees. These also students pay registrations fees only.

The Samuel Jackman Prescod Polytechnic (SJPP), on the other hand, is a technical and vocational institution currently offering certificate and diploma qualifications. Students at the BCC and the SJPP pay only registration fees only as well.

The University of the West Indies Cave Hill Campus covers a broad scope of university education mainly at the bachelor, master and doctoral levels. Students pay amenities fees which include transportation and guild fees. The fee levels in these institutions as at 2016-2017 are detailed in Table 3.

Table 3: Registration and Amenities Fees Paid by Students in Various Public Tertiary Education Institution in Barbados per year. (expressed in Barbados Dollars)

Institutions	Fee	Average Annual Fees				
	category	Certificate	Diploma	Undergraduate	Graduate	Postgraduate
	Registration					
	Amenities					
UWI				\$1010.00	\$1010.00	\$1010.00
BCC				\$1435.00		
				\$805.00		
SJPP		\$275.00	\$ 365.00			
ETTC						
		\$475.00	\$475.00	\$475.00		\$ 1200.00

Sources: SJPP Handbook; BCC Programmes of Study, UWI Fees Brochure 2016-

2017; ETTC Handbook

1.8 New Tuition Fee Structure for the University of the West Indies

The Minister of Finance in the Financial Statements and Budgetary Proposal 2013, stated that

while remaining committed to providing continued access to university education, the Barbados government could not continue to preside over a situation where the growth and development of the non-university component education system are being severely retarded, as a consequence, the government had decided that in an effort to assist it in meeting the exploding costs of university education, students attending and desirous of attending the University of the West Indies should contribute to their education in a more direct manner from the academic year 2014-2015. In the new configuration, students will be required to pay tuition fees; while the government will

continue to fund economic costs. (Barbados Estimates of Expenditure and Revenue, 2013-14, p. 354.).

The economic costs refer to the expenses paid to the UWI by the government for each student enrolled. It includes the expenses beyond tuition fees. On the other hand, the tuition fees which Barbadian students are being asked to pay is 20% of the economic cost of the degree programmes per year, per student in the various faculties. The new tuition fee structure would see students paying a 20% tuition fee based on the faculty in which they are enrolled and the state would pay 8%.

Table 4: New Tuition Fee Structure for the University of the West Indies

Faculty	Economic Costs paid by	Tuition Fee paid by the	
	Government (Bds.)	student (Bds.)	
Humanities and Education	\$28,125	\$5,625	
Social Sciences	\$28,125	\$5,625	
Science & Technology	\$28,125	\$5,625	
Law	\$44,040	\$8,808	
Medical Sciences	\$83,090	\$16,618	

Source: Government of Barbados 2013 Budgetary Proposals

The "conception and implementation of tertiary education funding in which the government paid 100% of the economic cost for students took place within a stable and predictable macroeconomic fiscal environment until September 2014. Primary in this matrix was a consideration of extreme wealth mal-distribution, endemic mass poverty, residual colonial institutional racism, economic and social injustice, and inadequate cultural confidence" which characterized the Barbadian landscape (MEHRD, 2012, p. 136). The funding of tertiary education "was intended to launch an education revolution for democracy which was designed to produce a broad-based middle class, popular professionalism in the human resource, and to uproot the deep historic material poverty among the majority labouring classes" (MEHRD, 2012, p. 136).

1.9 Reactions to the New Tuition Fee Policy

The then Opposition Leader Hon. Mia Amor Mottley, leader of the Barbados Labour Party, who is now the Prime Minister of Barbados, stated that the introduction of tuition fees would lead to a brain drain and deny persons an opportunity to ameliorate their circumstances through free university education. She further reiterated that the Government's decision to stop paying tuition fees can be termed as the ultimate betrayal. The Opposition Leader stated that Education had done more for Barbados than oil and gas have done for Trinidad and bauxite for Jamaica. Further, she pledged that her party, The Barbados Labour Party would not charge tuition fees for Barbadians attending the University of the West Indies (Nation Newspaper, 2013). It was also emphasised that one reason why Barbados was regarded as one of the leading developing countries was because of "the continuous investment in education." (Bradshaw, 2013). It should be noted that the policy was reversed in September 2018 by the new Minister of Education, Technological and Vocational Training, Hon. Santia Bradshaw after a change in government.

The Opposition Leader's view was shared by Principal Farley (2013), who grew up in a poor working-class family which could not pay for education even though his family budget was heavily subsidized with funds from his mother who lived in England. Farley posited that the ramifications of the introduction of tuition fees are so far-reaching as to constitute a breach or even a betrayal of social justice. The educator continued that education has been the ladder on which many persons from humble beginnings have risen to some social prominence. Similar sentiments were expressed by Wickham (2013) who proffered, that the new policy is a repudiation of the Government's commitment to egalitarianism since students whose parents can pay the fees will do so; while the others will be forced to study based on the size of the student loan.

The church community in Barbados was not left out of the debate. Indeed, the Social Justice Committee of the Anglican Church in Barbados appealed to the Government to exempt the current students from paying the tuition fees as they did not budget for the fees. The committee also suggested that a structure be put in place where

programmes which are critical to national development are identified for support. (Parris, 2013).

A slightly different perspective was given by a member of the Opposition Party, who stated that the level of social and human development which Barbados has experienced would become null and void if the fees were introduced. It was suggested that instead of the payment of fees, a tax should be imposed on members of the public who are successful products of the university (Phillips, 2013). Another member of the Opposition beseeched the Government to reconsider the implementation of the tuition fees which have been termed as retrograde and instead shelve some of the current projects so that money will be available to continue to fund the University (Gooding, 2013).

On the other hand, a Government Minister, speaking in support of the government's stance, suggested that the decision to introduce tuition fees was not a betrayal but was an attempt to safeguard the future of Barbadians by ensuring that the educational system does not collapse (Archibald, 2013). However, a Political Activist submitted that the introduction of the payment of tuition fees would be counter-productive in Barbados which has achieved the status as the education island across the globe (Gooding, 2014).

Representatives of the student guild protested the introduction of the fees, marching with placards in the main streets of Bridgetown. One representative is reported to have suggested that a phased-in approach was the best way and also advised that the University could absorb the fees. Another student is reported to have said that the jump in fees was astronomical, came too soon and was unreasonable (Husbands 2014). Additionally, the guild held meetings with the Minister of Education and the Principal of the University.

A compromise was touted by the Barbados Youth Development Council which stated that since the reasoning behind the introduction was understandable, there could be a staggered approach to the introduction of the tuition fees, but the amount and the speed of the implementation were of concern (Belgrave, 2013). However, the Principal of one of the tertiary institutions in contributing to the debate on the

introduction of the tuition fees, stated that the question to be answered is whether the transferring of a portion of the funding from the state to the student would not restrict upward mobility, confining persons to a life of poverty and hence depriving the state of greater benefits. (Belgrave, 2013).

Similarly, the Principal of one of the Secondary Schools stated that Barbados cannot afford not to have free education. In fact, this principle maintained that sudden cessation of the provision of free education would be a shock to the unique situation of a small nation-state with no natural resources. Instead, according to the Principal, there should be a temporary Higher Education Fund on incomes to be devoted to funding the university (Husbands, 2013).

The comments from the parents varied from a resignation that they cannot change the policy to an affirmation that as far as they are concerned, they will make sure that their children complete the university education. Notwithstanding this, some parents expressed that they would have preferred to have had more notice of the change (Thangaraj, 2013).

An interesting position was taken by the representative of the University Alumni Association (Barbados Chapter) who stated that the payment of the tuition fees was a sensitive issue and the students should see it as an investment in their development (Lightbourne, 2013). However, a representative of one of the Teacher's Union countered the position taken by the University Alumni Association (Barbados Chapter), saying that the problem is not about the fees but with the implementation which should have been a phased approach with caps on the applicants in the various programmes based on the country's needs over a five to ten-year period. (Husbands, 2014).

In response to the criticism of the new fee structure, the Minister of Education made it clear that freeness cannot continue forever and that the Government was not seeking to pull the rug from under anyone or to destroy anyone's legacy. He further stated that bursaries will be provided for the students as well as access to loans from the Student Revolving Loan Fund. (Gooding, 2014).

1.10 Government's financing of the New Tuition Fee Policy

Clearly, the funding model represented a major shift in policy for the country as a whole. It could be logically argued that the reality is that the government could not continue to contract such huge amounts of expenditure for which it knowingly had no sustainable means of meeting. This decision was met with much discussion from practically every sector of the Barbadian society. Therefore, this research should inform policymakers of the views and perceptions of students, parents, Ministry of Education, Science and Technology personnel, and significant administrators at the University of the West Indies, on the impact of the policy of students paying tuition fees to fund university education. It will also highlight the challenges associated with the new funding model and proposals for alternative models of funding tertiary education at the university.

1.11 Significance of the Study

This research has the capacity to inform and influence further educational reform in Barbados. There are key stakeholders in education who would find the data emanating from this research useful in terms of supporting decisions about the need to rescind or modify the proposed policy. For example, as Chief Education Officer I would want to know what effect this change will have on the access to tertiary education at the university level. This information is needed because if this policy change results in the majority of students who are in the vulnerable population being denied access because of the inability to pay the fees, then representation must be made to change or modify the policy and suggest alternative models. It must be noted that the policy of universal free education was predicated on the fact that an investment in education was the vehicle to build the human capital that is necessary for national development. This study, therefore, seeks to answer the following research questions:

1. What are the perceptions of policymakers, University Administrators, informed specialists, senior public administrators, students and parents on

- financing tertiary education at the University of the West Indies, Cave Hill, Barbados?
- 2. What do the majority of participants' view as the best options for financing tertiary education at the University of the West Indies, Cave Hill, Barbados?

The remainder of the study will be structured as follows: Chapter 2 is devoted to research on the literature surrounding the funding of tertiary education. An examination of the literature on the human capital theory will be discussed as a developmental policy and the social justice theory will be discussed in the context of access to tertiary education. The funding models used internationally and locally will also be discussed. Chapter 3 addresses the research methodology which was used to elicit responses to the research questions. Chapter 4 presents the data and discussed the findings on the perceptions of stakeholders related to research questions and Chapter 5, the final chapter presents a summary of the research and its implications.

CHAPTER 2 LITERATURE REVIEW

2.1 Scope of the Literature Review

This chapter starts with a definition of the term tertiary education and will provide the history of tertiary education in Barbados, regionally and internationally. Justification will be provided for financing tertiary education internationally followed by a discussion on the challenges of sustainable financing for tertiary education in small states. The human capital and social justice theories will be discussed in relation to development policies pursued by Barbados. Additionally, the critical discussion on the financing strategies both internationally and in the Caribbean region and specifically the Barbadian Context will be outlined. During this discussion, the various models of financing Tertiary Education will be evaluated, drawing from the international experiences and comparing these models with what exists in the Caribbean and in particular in Barbados. Finally, the financial assistance schemes employed by governments internationally will conclude the chapter.

2.2 Tertiary Education Defined

For decades in Barbados, the term tertiary education has been used synonymously with the term higher education to refer to education at the post-secondary level, including colleges, technical training institutes and vocational schools. More recently, usage of the term has broadened to generally include formal education provided in post-secondary institutions and which leads to degrees, certificates and diplomas (Layne, 1989, p. 9; World Bank, 2013, p. 1). In Barbados the higher education institutions do not offer degrees, they offer certificates and diplomas. The Samuel Jackman Institute of Technology (SJPI) and the Barbados Vocational Training Board (BVTB) are two such institutions. The University of the West Indies, (UWI), Cave Hill Campus, The Erdiston Teachers' College (ETTC) and the Barbados Community College (BCC) offer, certificates, diplomas, associate degrees, degrees at the undergraduate or the graduate level and hence the reference to the term tertiary education institutions. Therefore, in this paper, the term higher education and tertiary

education will be used interchangeably to describe education beyond secondary school.

The World Bank notes that

Universities are clearly a key part of all tertiary systems, ... the diverse and growing set of public and private tertiary institutions in every country — colleges, technical training institutes, community colleges, nursing schools, research laboratories, centres of excellence, distance learning centres, and many more — form a network of institutions that support the production of the higher-order capacity necessary for development (The World Bank, 2002, p. 9).

Henchey (1990), proffered a slightly different definition by suggesting that the term "tertiary education can be seen as applying: to a level of learning (more advanced than secondary), to a type of clientele (normally older adolescents and young adults, but increasingly older adults as well), and to certain kinds of institutions (universities, colleges, institutes, advanced schools) that are distinct from the structure of primary and secondary education" (p. 58). According to Roberts (2003) "in the Caribbean since the 1990s, the term tertiary education has included educational programmes at universities, university colleges, colleges, institutes and polytechnics. Access to tertiary education means the provision of the opportunity for individuals to experience education at the post-secondary level" (p. 18). Roberts continued that it can be perceived "as the opening of a door...the open door is a necessary but not sufficient condition for entrance" (p. 53). By definition, the provision of mass access is inclusive of all individuals providing they meet the entry requirements. Howe (2005) states "that tertiary education in the Caribbean remains predominantly a public sector activity" (p. 67).

According to Tewarie (2009, p. 121) in the Caribbean region, tertiary education is offered at the four campuses of the University of the West Indies (UWI), and there is a presence in all fifteen contributing territories. It also has a wide offering of undergraduate, postgraduate, certificate and diploma programmes and a student population of over forty thousand. At present, there are forty thousand five hundred and sixty-seven students enrolled (UWI Statistics 2017-18). Recently, the Five Islands

Campus in Antigua opened in April 2019 bringing the number of campuses of the (UWI) to five. Tewarie (2010) "the region had by 2010 over one hundred and fifty (150) institutions made up of 60% public, 30% private and the remaining 10% private with government support" (p. 122). Additionally, some territories have attracted "offshore tertiary education institutions, the majority of which are universities which specialise in medicine" (p. 122). Within recent years, a number of pre-clinical medical schools have also started in Barbados offering training to students from around the world, hoping to take up residency at a United States Hospital. Additionally, Howe (2003) indicates that a number of the territories have opened new national universities, other tertiary institutions and community colleges.

2.3 History of Tertiary Education in Barbados

In the fifty (50) years since independence, "Barbados has transformed from a low-income country and an economy dependent on sugar production to an upper-middle-income service-oriented country and economy heavily dependent on tourism, financial services, and a modest manufacturing sector" (Ministry of Education and Human Resources, 2010, p. 1). Layne (1989) provides a history of higher education in Barbados from the colonial period to 1989. Although limited by the absence of economic data on students pursuing higher education at the time, it provides some insight into the country's journey with tertiary access. As a consequence of our British Colonial Status from 1627 to 30 November 1966, tertiary education in Barbados usually meant being educated overseas at a university or college. Access to tertiary education during this period was, therefore, limited to the privileged few who were in a position to afford tertiary education upon completion of secondary schooling.

Codrington College, which was opened in Barbados in 1830, was the first attempt at tertiary access provided by any British West Indian Colony during the colonial period. Layne (1989) stated "that between 1830 and 1847, 111 students graduated from this college. Barbadians accounted for 60% of these graduates" (p. 14). In 1875, the College became affiliated with Durham University and a degree programme was started. A teacher-training aspect (the Rawle Training Institute) was later added in 1913. This aspect of the College's programme ended in 1948 when Erdiston

Teachers' Training College was opened. The affiliation with Durham University had ended by 1958, and Codrington College later became affiliated with the UWI (facilitating programmes leading to the Licentiate in Theology and the B.A. degree in Theology (Layne, 1989, p. 16). Furthermore, Layne (1989) states that The University College of the West Indies was established in October 1948 with a single campus in Jamaica. It was later renamed the University of the West Indies in 1962. It was a regional institution and so provided access to University level programmes for Caribbean countries that previously lacked this access (Barbados included). It began with a total of 33 students in 1948 and had increased to 695 in 1959. The opening of this institution propelled the Barbados government to increase its financial assistance to tertiary education. Layne (1989) notes that by 1956, for example, 8 of the 25 scholarships offered were utilized at the UCWI.

The establishment of the UWI campus in Barbados in 1963 (initially known as the College of Arts and Science) provided the opportunity for mass access to tertiary education for Barbadians, and so from the beginning, tuition was free for all Barbadians who met the requirements. Upon gaining its independence in 1966, tertiary access to education became recognized and accepted by Barbadians and the Barbados Government as a requirement for national development. Consequently, the Barbados Community College opened in 1969 with a mandate "to improve the facilities available to the community for training in a wide range of skills at technician, middle-management, and pre-university levels" (Barbados Development Plan, 1973-77, pp. 10-12). In 1985/86 it provided access to 1750 students. In an analysis of enrolment in the first degree and certificate and diploma programmes at UWI by territory, Layne (1989) found "that for the school year 1985/86 throughout the 3 campuses, there were 1195 Barbadians pursuing first degrees, and 100 pursuing certificate and diploma programmes (a total of 1295 students). Spending on tertiary education by the government was Bds.\$1.3 million in 1981/82, and Bds.1.4 million in 1984/85" (p. 36).

2.4 The International Context of Tertiary Education

The economic importance of higher education is well established. According to Murphy, Scott-Clayton & Wyness (2017), "the increasing demand for higher education coupled with increases in per-student costs means that it is difficult for the government to maintain funding" (p. 3). Johnstone, (2007) emphasises that "the costs of student maintenance are high and already beyond the reach of many families" (p. 2).

According to Murphy et.al (2017), "some countries and states where tuition fees have been long established are now swinging back towards free higher education" (p. 3). In England, one of the original architects of tuition fees, recently called for their abolition while the main opposition party's popular manifesto pledges to abolish fees" (p. 3).

Marcucci and Johnstone (2007) have proffered several reasons that

historically, the development of many higher education systems particularly in Western, Central and Eastern Europe, Russia and the nations of the Former-Soviet Union and Francophone Africa was based on the philosophy of free tertiary education for qualified students. These included the fact that education is a fundamental right which has high returns to the society (p. 2).

In a study done by The Department of Higher Education and Training of the Republic of South Africa (2012) it was reported that "tuition fees may discourage the participation of students from low-income families, rural areas or ethnic minorities" (DHET Republic of South Africa 2013 p.14) However, in some cases, Marcucci and Johnstone (2007) suggest that "the immediate beneficiaries of free public higher education have tended to be the politically powerful middle and upper classes" (p. 5). According to Marcucci and Johnstone (2007) and Marcucci (2013), who opined that while in most countries, the costs tend to be paid by taxes, however as a result of the increasing cost of delivering higher education and, with the increase of student enrolment, coupled with the competition from other sectors like health care and primary education, most governments have had to re-examine the policy of funding higher education. This has influenced the government's decision to ask students and

parents to carry some of the costs of higher education. Whatever the argument is for the shifting of the burden of the cost of higher education, it is a fact "that growing enrolments and decreasing government investment has translated into policies which are encouraging the charging of tuition fees" Marcucci and Johnstone (2007, pp. 2-3)

2.5 Justification for Financing Tertiary Education

"The financing of higher education in developing countries has been largely borne by the government through tax financing with little or zero cost is borne by students" (World Bank, 2010, p. 5). Teferra (2007) added, "that in virtually all sub-Saharan countries, the state provides over 90% of the support for higher education" (p. 2). From the late 80's Psacharopoulos (1986) warned, "such a system is unsustainable in the face of rising demand for education coupled with limited government revenue" (p. 2). Darrell and Dundar (2000) opined that "whereas the number of students in the developing countries has more than tripled over the past two decades, the amount of public resources allocated to higher education has only increased by 15%" (p. 2).

Espinoza (2008) in a review of the educational policies implemented in Chile from 1987 to 1998 concludes "that the upper and middle-class students gained access to higher education disproportionately compared to lower and middle-income groups" (p. 14). According to Fahim and Sami (2011), this conclusion can be reached in the case of Egypt and Tunisia. In The World Bank Documents by Psacharopoulos which published the first comparative study of rates of "Returns to Investment in Education" in 1973 and in subsequent writings in 1981, 1985, and 1994 attention is drawn to the fact, that higher education has the lowest social returns to education and that the private returns significantly exceed that of the social returns. Psacharopoulos studies "all emphasized that the social rate of returns to primary education was considerably higher in most countries than the rate of return to higher education and that the private returns to higher education were much higher than the social returns" (1994 p. 19). Psacharopoulos' position was supported by the World Bank in a report in 1995 and following the 'Jomtien Conference on Education for all in 1990', a review of the policy on funding of higher education by governments and donor agencies resulted in a reduction of funding for higher education. This reduction led to the introduction of university tuition fees in many developing countries (Woodall,2007). However, McMahon (1999) "concluded that the social benefits of education, including contributions to political stability and the role of higher education in creating and transmitting new knowledge, were extremely significant and were likely to raise the social rates of return significantly" (p. 2).

Increasing economic pressure coupled with the discussion on the rates of return has led to a situation where most developing states have recognised that students must contribute to the cost of their degrees. According to Johnstone (2003a), in most of Africa, the combination of declining economies, political and social instability and conflict has led to diminishing accessibility to tertiary education. These situations have given rise to the "concept of cost-sharing or the shifting of a portion of the higher education costs of instruction being borne by the government or taxpayers, to a portion of the costs being shared by parents and students" Johnstone (2003a, p. 1). While the benefits of tertiary education have been well articulated by McMahon (1999) and Psacharopoulos (1994), there are some of the challenges of sustainable financing for tertiary education in small states which I will now discuss.

2.6 The Challenges of Sustainable Financing for Tertiary Education in Small States

2.6.1 Definition of Small States

According to Bray and Martin (2011), "small states comprise a large proportion of the total number in the world. Among UNESCO's 193 Member States and seven Associate Members, 66 have populations below 3 million" (p. 25). These states vary in and include all of the Caribbean territories. Table 5: shows the distribution of some small states and territories across the world. In 2008, the population of these states was below three million.

Table 5: The World's small states and territories

AFRICA	ARAB STATES	ATLANTIC	CARIBBEAN	
Botswana	Bahrain	Bermuda	Barbados	
Gabon	Kuwait	Cape Verde	Belize	
Guinea Bissau	Oman	Greenland	Guyana	
Lesotho	Qatar	Iceland	Jamaica	
Namibia			Trinidad & Tobago	
EUROPE	INDIAN OCEAN	SOUTH PACIFIC	ASIA	
Andorra	Comoros	Fiji Island	Bhutan	
Channel Island	Maldives	Marshall Island	Brunei Darussalam	
Cyprus	Mauritius	Nauru	Mongolia	
Estonia	Seychelles		Timor Leste	

Source: Tertiary Education in Small States Martin and Bray (2011)

2.6.2 The Challenges of Small States

The small states paradigm posits "that small states have an ecology of their own and are not simply scaled-down versions of medium-sized and large states" (Bray, 2011, p. 37). The Commonwealth Secretariat's Vulnerability report (1985) identified some economic challenges of small states. These include a narrow resource base which restricts agricultural development; lack of economies of scale which hinders industrialization, lack of indigenous technological bases, relative openness which leads to the imbalance in the import-export trade; and infrastructural costs in relation to the development of ports of entry and administration of the public sector. Additionally, the report cites other characteristics of small states such as the remoteness of some islands and their susceptibility to natural disasters such as typhoons or hurricanes, and the lack of some small states to readily access international capital markets. The above-outlined features suggest that small states can be very vulnerable. It is noteworthy that this report was done in 1985 and in 2016 these issues are still applicable.

According to Crossley (2019), small island states have to grapple "with their own educational priorities and those of the international organisations" (p. 9). Crossley (2019) continues that while the post-Jomtien (UNESCO 1990) spoke to increase

access to primary education, this was already achieved by small states and also as it relates to tertiary education which has been a priority for small states which went contrary to the global agenda. Martin and Bray (2011) state that small states while being beneficiaries of the opportunities provided by international organisations, they must contribute to the economic dialogue to their benefit.

According to Tewarie (2010) suggests, "the demand for tertiary education is growing everywhere and governments cannot afford to pay for the expansion" (p. 233). As a result, therefore more investment in tertiary education is needed. However, Tewarie (2010) suggests that funding for tertiary education is challenged by the economic difficulties and decisions have to be made as to where to place the emphasis in the educational system, be it primary, secondary or tertiary.

Tewarie (2010) proffered another challenge which should be considered by the government on how the role of tertiary education is viewed, he states that:

If it views tertiary education in terms of human capital formation, then the mix of means to achieve the goal- public or private, or distance or face to face-might not greatly matter. However, if a government and the people see institution building as essential to national development, the matter becomes not only one of cost, efficiency and effectiveness but also of national identity, pride and ideology (p. 236).

2.6.3 Caribbean and Barbadian Context

According to Crossley and Louisy (2019) "tertiary education in the small states in the Caribbean was model after the metropolitan countries. The argument was advanced that it was more cost-effective for students to attend universities overseas" (p. 464) however in spite of this view the expansion of tertiary education has led to the expansion of the University of the West Indies into three island campuses and an online open campus (Crossley and Louisy 2019). However, Crossley and Louisy (2019) suggests that this regional approach was challenged after many states attained independence by the provision of tertiary education through State or Community Colleges.

According to the World Bank (2009), small states were affected more than larger ones during the financial crisis of 2008-2009. Tewarie (2011, p. 2) concur that the "financial vulnerability of small states inevitably impacts on individual tertiary institutions as less institutional funding from government forces the institutions to find ways of reducing cost, find alternative sources of funding, and increase efficiency and effectiveness".

Tewarie (2010) posits that in some small states which depend on tourism the "economy is largely dependent on tourism and at present as a result of the global recession, the effects of the decline in this sector are being felt" (pp. 234-235). As a small island state, Barbados relies heavily on tourism and financial services. In this scenario, it is not surprising that broader fiscal pressures will come to bear heavily on all sectors and entities at all levels, whether health facilities, state corporations or academic institutions like UWI Cave Hill. Clearly, by emphasising that students will meet direct tuition fees while the government continues to shoulder economic fees for the programmes offered at UWI-Cave Hill, the Minister for Finance in the Financial Statements and Budgetary Proposals 2013 (delivered in Parliament August 13, 2013) was basically asserting that the time for cost-sharing in financing university education in Barbados has come. This will entail partnership between the students, their parents or guardians and the state.

According to Tewarie (2010) and Louisy and Crossely (2011), the fate of such institutions largely depends on what governments see as the role of tertiary education in the development of their countries coupled with the international influences. Is it for the human capital formation or institution building? Is it essential for national development? Answers to these questions will inform policy, which will in turn influence funding modalities of the tertiary education sub-sector. I will now discuss theories of human capital and social justice which influenced development policies relating to the funding of tertiary education in Barbados.

2.7 Human Capital Theory, Social Justice and Tertiary Education

It is clear that successive political administrations of Barbados pursued the philosophy of the development of the human capital known as "the human capital theory". Olaniyan and Okemakindle (2008) suggest "that formal education is highly instrumental and even necessary to improve the production capacity of a population" (p. 479). Marginson (2015) postulates that "the human capital theory assumes that education determines the marginal productivity of labour and that marginal productivity determines earnings" (p. 2). Psacharopoulos et al. (2004a) state "that the human capital theory has roots in the work of classical authors such as Adam Smith (1776) and Alfred Marshall (1890). Smith (1776) posits that "a man educated at the expense of much labour and time may be compared to one of those expensive machines ... and the work he learns to perform should replace to him the whole expense of his education" (p. 1).

According to Mulongo (2012 p. 1) authors such as Mincer (1958), Schultz (1961) and Becker (1975) affirm that "time and money spent on education builds human capital and; therefore, the rate of return can be estimated. Therefore, the human capital theory postulates "that an individual bear the cost of education because it is expected that this investment will create a further stream of benefits in terms of higher wages" (Mulongo, 2012, p. 1). Psacharopoulos and Patrinos (2004) concluded, "that educational quality has a strong impact on individual earning" (p. 1). McIntosh and Vignoles (2001, p. 1) "found strong returns to investment in their study conducted in the United Kingdom" (p. 1); while Green and Riddell (2003) found the same in Canada, "the higher the education level, the higher the income" (p. 1).

According to Babalola (2003)

the rationality behind investment in human capital is based on three arguments.

- 1. The new generation must be given the appropriate parts of the knowledge which has already been accumulated by previous generations.
- 2. The new generation should be taught how existing knowledge should be used to develop new products, to introduce new processes and production models and social services.

3. People must be encouraged to develop entirely new ideas, products, processes and models through creative approaches (p. 23)

Riddell (2006) submits, "that investments are made in human resources in order to improve productivity and therefore employment prospects and earnings" (p. 3). As a result, it was recognized that Barbados' primary resource was its people; hence, the provision of free tertiary education. In 1962 the abolition of school fees and the establishment of the tertiary institutions signalled the significant investment involved in the national system of education. Riddell (2006, p. 3) "referred to this investment decision as being one where individuals incur costs at the present time in return for benefits in the future". Additionally, according to the Strategic Plan 2002-2012, "this investment in human capital has led to a relatively high level of educational attainment among Barbadians. This process has, has become a part of the Barbadian identity and is considered a significant asset in the information age" (Ministry of Education, Youth Affairs and Sports Strategic Plan, 2002-2012, p. 7)

Almendarez (2016)) argues, "that the provision of formal education is seen as an investment in human capital which proponents of the theory have considered as equally or even more worthwhile than that of physical capital" (p. 21). The philosophy underlying the Barbadian Government's policy as stated in the Ministry of Education, Youth Affairs and Sports' Strategic Plan 2002-2012 to publicly funded tertiary education is that the "investment is an important instrument in the social and economic transformation of the country" (p. 7). Robert (1991, p.480) developed" a human capital model which shows that education and the creation of human capital are responsible for both the differences in labour productivity and the difference in overall levels of technology that we observed in the world today". Riddell (2005) theorized "that the social rates of return to education are not necessarily as high as private returns; however, there are benefits for less criminal activity, lower health costs and lower dependence on welfare" (p. 15). Almendarez (2016) postulates "that in the new global economy, education and health care are key to improving human capital and ultimately increasing economic output" (p. 21). Hanushek and Woessmann (2015); Hanushek (2016) opined that empirical data does not support that an expanded university education which produces more graduates leads to faster

growth, what does, is the differences in cognitive skills and not adding more years of schooling.

According to MEHRD (2012), tertiary education is seen by the policymakers and implementers:

as the engine which drives the building of a just society. This just society is predicated on the notion that access to tertiary education in Barbados provides equal opportunities for individuals to socially advance and to play a significant role in the life of the community by enhancing their participation in political and social institutions (p. 12).

In the Opening of the Legislative Session, (1961-66), in the Throne Speech, delivered by the Governor, His Excellency J.M. Stow, the following policy statements were articulated: "construction of new schools and extension blocks to existing schools, free secondary education in ten Government aided secondary schools, establishment of Liberal Arts College to accommodate evening students for degree courses" (Stow 1961 p. 11). In the (1965-68) Barbados Development Plan, "it was clearly stated that the policy on education was based on the premise that every child should have educational opportunities which would allow that child to make a meaningful contribution to the social and economic growth of the society" (1965-68, p. 67). The National Strategic Plan of Barbados (2005-2025) states the following "The key to unlocking the productive potential of Barbadians is a continued revolution in education from the nursery to the tertiary level with the aim of maximizing educational opportunities for all" (Ministry of Education, 2005, p. 34). Furthermore, Section 52 (1) of the Education Act Cap 41 states that "Education is free in public educational institutions" (p. 28) and the Interpretation section of the Act, "public education institution" means an educational institution that is wholly or mainly maintained at the public expense (p. 6). Thus according to MEHRD (2012) "the philosophy underlying the policies of the Barbadian government to publicly fund tertiary education was that the investment was an important instrument in the social and economic transformation of the country" (p. 12).

Ho (2011) theorises "that the concept of social justice involves finding the optimum balance between our joint responsibilities as a society and our responsibilities as

individuals to contribute to a just society" (p. 2). Sen (2008), acknowledges "that a right to education concerns not simply an individual's access to appropriate educational material but the responsibility of government to provide a stable presence of certain institutions and institutional frameworks" (p. 8). Furthermore, Sturman (1997) posits "that social justice should draw attention to non-material components of equity, such as empowerment and should focus on the least advantaged" (p. 1).

The Human Resource Development Strategy, (2011-2016) notes that in 2009 the UNDP Human Development Report ranked Barbados 37th among 190+ countries. The Government believes that by focusing on vulnerable groups and seeking to ensure their participation at all levels of the education system, this will build social and economic equity, and reduce the poverty rate .MEHRD (2010) proffered that tertiary education will achieve substantially increased "output in tradable sectors such as (tourism, international business and financial services, manufacturing as well as agriculture and fisheries, creating new export services in culture, sports, education, professional service, construction services, computer services, and health services" (p. 144). Persons employed in these sectors benefit from the education which leads to specialization in the respective fields. For example, persons who work in the tourism sector in the hotel industry are trained at the BCC and are awarded Associate Degrees. With the opportunity for training at the SJPP in technical and vocational education, it is expected that a new culture of entrepreneurship and a cadre of local business entrepreneurs will be developed (MOE, 2010).

In an assessment of the benefits of tertiary access to education, MEHRD (2012) states that tertiary education brings social and economic benefits to citizens of Barbados and has alleviated many socio-economic problems associated with income inequality and public health. This assessment of the benefits of tertiary education is supported by the United Nations (2005), Rodriquez-Pose & Tselios (2008), and Smart (2006). (Moore, 2006) opines that government had a set target of one graduate in every household by the year 2020 and it is believed that this would result in an increase in Barbados' rate of annual real GDP growth by 1.2 % every year, given that the estimated average income of most university graduates is 80% higher than the average Barbadian worker. Additionally, Moore (2006) posits "that if the goal of having a graduate in

every household by 2020 is achieved, this would lead to a significant gain in the standard of living and a reduction in poverty" (p. 28).

However, de Gayardon (2017) counters "that free-tuition higher education does not guarantee improving access or success in the future because it is not a targeted policy and while it is egalitarian, it can and often does create inequity" (pp. 12-13). Barr (2008) supports this position and posits that "quality suffers because the education budget has to compete with other budget imperatives and within the education budget; universities compete with nursery education, school education and vocational training" (p. 36). Additionally, access suffers "if places are scarce because middle-class students tend to get them the need to finance a mass system creates concerns about quality and means that resources to promote access are limited" (Barr, 2008, p. 36).

In 1961Schultz noted that "access to education plays a crucial role in equipping persons with opportunities that shape their character, and develop their personal, economic, social-cultural and cultural status" (p. 1). Craigwell, Lowe and Bynoe (2010) support this perspective and notes that access to tertiary education has a "progressive influence on health, income, family structure and political participation in Caribbean countries" (p 7.). Moore (2006, p. 34) in a study of the potential impact of a rise in university graduates on output in Barbados proposed that educational attainment "has a positive impact on economic output. He suggested that an increased number of households with a university graduate would result in a fall in poverty levels and an increase in the standard of living" (p. 34). However, Swaroop (1996) in surveying economic development in Caribbean countries from 1981 to 1995, cautioned, "that a more in-depth assessment of government resource allocation between primary and tertiary levels of education is necessary to make inferences about the benefits of such educational investments" (p. 8). Furthermore, Griffith (2001), notes that while educational attainment levels do lead to "efficiency in resource utilization resulting in higher productivity and increased income levels but market-determined allocation may cause a skewness in income levels of the populous thereby contribute to further unevenness in income distribution" (p. 154).

In Barbados, educational attainment levels lead to increased earning capacity which in turn leads to upward mobility. In both the public and private sector, employees are paid as a result of their tertiary qualifications. This is unlike the case in the developed countries, where individuals are only paid for certain types of tertiary level qualifications. An example of this is in the teaching profession where a graduate teacher is paid for his or her degree regardless of the area of study. This is not to imply that there are not specialized areas of study. There are teachers who are categorized as Special Grade teachers who are specialist in the field of Music, Physical Education and Visual Arts and whose salary scale is dependent on the tertiary level qualification and the number of hours taught in the particular subject area. (Ministry of the Civil Service, Teachers Order (2001) Ministry of the Civil Service, Teachers Order (2008). At this juncture, I will discuss the various financing strategies used to finance tertiary education.

2.8 Financing Strategies

In this section, I will discuss the following financing strategies used by countries to support tertiary education, privatization, cost-sharing, tuition fees and dual-track tuition fees.

2.8.1 Privatization

In almost all developing countries, there has been significant growth in private higher education institutions as a result of policy shifts brought on by the wave of liberalisation (Varghese, 2005, p. 25). According to Marimuthu (2008), in Malaysia between 1992 and 2001, "the number of private higher education institutions increased from 156 to 706" (p. 3), In Brazil, "the number of private higher education institutions rose from 689 to 1652" (Bertolin and Leite, 2008, p. 3). Al-Salamat, Kanaan and Hanania (2011) note "that the cost per student in the public universities in Jordan average at about 14% higher than the corresponding cost in the private sector" (p. 10). Barr (2005) argues that "an increase in the number of universities should be accompanied by an increase in quality education due to increased competition" (p. 3). However, Bertolin and Leite (2008) state "that this has not been the case in Brazil as the private sector consistently presented the worst performance in terms of qualitative

indicators related to relevance and effectiveness" (p. 3). Johnstone et al (2008) stated that students from poorer backgrounds are discriminated against because of the high tuition fees at the private university. In Kenya, private universities students account for about 20% of the university population with 50% of the students enrolled were women (Brown, 2001; Nzome, 2000). Students at private universities pay 100% of the fees and therefore only students whose parents can afford to pay can access the private universities (Varghese, 2005). Tewarie (2009) noted "that of the one hundred and fifty institutions in the Caribbean, 60% were public, 30% were private and 10% received limited government support" (p. 122). Having examined this model of financing tertiary education, it is my opinion that most of the students who are from poor families would be disadvantaged because of the inability to pay the fees.

2.8.2 Cost Sharing

Cost-sharing in tertiary education is the undertaking by parents and students to pay a portion of the costs of tertiary education that has been borne by the government or taxpayers. This cost-sharing is well documented in Johnstone (1992, 1993b, 1996, 2002). Johnstone, (2003) states "that the costs of tertiary education are shared among governments or taxpayers, parents, students and philanthropists" (p. 5). Cost-sharing is most associated with tuition fees and user charges for the cost of living expenses or for books and any other costs. According to Johnstone and Marcucci (2007), cost-sharing was introduced in China in 1997, the United Kingdom in 1998 and in Austria in 2001as a result of the introduction of tuition fees. The issue of cost-sharing surrounds the questions of how much should be paid, should it be part of the economic cost, should it be based on academic performance or is it based on family income. In light of the discussion on the social justice theory and the human capital development theory, the answers to these questions must be based on the family income for students from the lower socio-economic level.

The acronym BRIC is used to describe the following countries Brazil, Russia, India and China. With the rapid expansion for the demand of higher education, "all four countries have turned increasingly to make students and their families share in the costs of expanding higher education, either through tuition in a public institution or promoting the expansion of full-tuition private universities and colleges. Some of the BRICs are also putting increased resources into a few elite institutions, while mass

institutions absorb mostly new students at a relatively low cost to the institutions but relatively high cost to the students." (Carnoy, Loyalka, Dobryakova, Dossani, Froumin, Kuhns, Tikla& Wang 2013, p. 39)

2.8.3 Tuition Fees

Johnstone (2002) argues "that tuition fees are a more equitable way of financing education especially in developing countries where higher education is shared by few, and disproportionately by the children of high-income parents as this reduces the repressiveness of tax financing. Though more equitable than tax financing, tuition fees increase the direct costs of higher education and may further limit enrolment to only those students who are able to afford these fees" (p. 1). Menene and Otieno (2007) indicate "that a highly subsidised fee of \$693 per year is charged by public universities in Kenya but because of the capital income of Kenya which is \$390, it still makes it expensive for poor households. The idea of tuition fees, has met with some opposition in some countries and its implementation has been slow due to political reasons" (p. 469). Eboh and Obasi (2002) note "that in Nigeria the introduction of cost-sharing policies has led to two very violent student demonstrations which claimed the lives of students" (p. 2). The policy of tuition fees has the effect of preventing students from poor families in accessing tertiary education and a determination will have to be made about those students who will pay. The reality of the situation is that the students who parents can afford to pay would access the instruction.

2.8.4. Dual Track Tuition Fees

Johnstone (2008) notes "that along with the tuition fee there is a dual-track system where less qualified students are enrolled on the basis of payment of full tuition costs" (p. 3). This model provides the universities with revenue; however, it might elicit favouritism towards these students and reduce the places available for the government-supported students. Marcucci, Johnstone and Ngolovoi (2008) postulate that the dual-track policies are "based on the need of the government or the institution to severely ration a limited number of places that are free (or nearly free) for political or legal reasons generally using a single examination while allowing another tuition fee-paying track or tracks for the desperately needed revenue supplementation" (p. 5). Further according to Marcucci et al (2008) in Kenya and Uganda, the question of

equity of this strategy can be challenged as there are limited free spaces, so there is a highly competitive examination process which tends to favour the children of the well-educated and privileged, who would have attended some of the best secondary schools and have access to the wealth of their parents. This policy affords the universities the opportunity to earn revenue by charging international students fees which are higher than those local students pay or when the local don't pay fees at all. Again, this policy has the effect of disadvantaging the students whose parents can't afford to pay, but the university benefits.

All of the policies discussed focussed on the response of the government to student funding of tertiary education and the need for revenue-generating policies.

2.9 Models of Financing Higher Education

The ways that some developed countries have sought to continue to finance and provide tertiary education will now be examined. These models discussed include: no tuition fee, income-contingent loans, and mixed model.

The demand for education beyond the secondary level in most countries has increased. Consequently, pressure has been placed on governments to provide public resources to meet this demand. According to Marcucci (2013) "student funding policies involve decisions about the appropriate division of higher education costs, between the students and families and the state" (p. 11). Some countries have instituted tuition fee policies that have been implemented in various forms.

2.9.1 No Tuition Fee

Until 1998, domestic full-time undergraduate "students in England could attend public universities completely free of charge. Concerns about declining quality, government-mandated caps on enrolment and rising inequality in college attainment led to reforms" (Murphy, Scott-Clayton & Wyness, 2017, p. 3). Dearden, Fitzsimons, Goodman and Kaplan (2008) stated that the new policy would result in individuals from the lower parental income seeing a reduction in the lifetime cost of their higher

education while individuals from the middle to high parts of parental income will see an increase in their costs.

In a later study Dearden, Fitzsimons and Wyness (2014) stated that the United Kingdom (UK) Higher Education finance system, consisted of three elements: maintenance grants introduced in 1962, maintenance loans in 1990 and tuition fees in 1998/1999. Dearden et al (2014) opined that maintenance grants "are a non-repayable form of support and are means-tested according to parental income and background. Maintenance loans are repayable as a percentage of earnings when the graduate is in employment and earning over a certain threshold. Tuition Fees have changed to being means-tested and up-front for the period 1998/1999-2005/2006 and then deferrable and backed by tuition fee loan from 2006/2007 onwards" (p. 68). It must be noted that these three elements were set by the government and not by the Higher Education Institution. Dearden et al investigated the impact of the maintenance grant for poorer students and their participation in degree programmes. The findings revealed that maintenance grants have positively affected degree participation of these students of approximately 3.95%. Further, they found that the tuition fees in the UK have risen to nine thousand pounds per year, some of the "highest in the world, and the government has committed to maintaining non-repayable subsidies for poor students with the grant rising to approximately three thousand four hundred pounds in 2014" (p. 77).

Murphy et al (2017) examined the "consequences of charging tuition fees on university quality, enrolments and equity. Their findings suggested that charging tuition fees "has resulted in increased funding per head, rising enrolments and a narrowing of the participation gap between advantaged and disadvantaged students" (p. 22). The UK model of the income-contingent loan system, according to Murphy et al (2017) keeps university free at the point of entry and the maintenance grants provide generous assistance for living expenses. This model sees student's access income-contingent loans, which cover the full cost of their fees, and is tied to the graduate's future income.

Barr (2013) stated that fifty years ago higher education was not very important in economic terms however today higher education transmits knowledge, promotes core values, "develop knowledge for its own sake and promote economic growth in a

competitive economy. It must also be recognized that skill-biased technological change is driving up the demand for skills," requiring more training. (pp. 7-8). Barr (2013) posits that graduates should share in the cost of their degree, not students because the well-designed student "loans should be large enough to cover fees and living costs so that tertiary education is free at the point of use" (pp. 13-14. Barr (2013) like Murphy et al (2017) supports the income-contingent repayments designed so that the graduates repay in full present-value terms and built-in insurance against the inability to repay and most importantly "students get it free: it's graduates who repay" (Barr, 2013, p. 53).

However, Blanden and Machin (2003) advanced "that the higher education expansion has not been equally distributed across people from richer and poorer backgrounds, rather it has disproportionately benefited children from relatively rich families" (p. 1). Jongbloed (2010, p. 15) opines that "in continental Europe, students pay only a modest fee or no tuition fee at all, twenty nations pay no fees at all, six pay fees below five hundred pounds and eight pay fees above five hundred pounds". However, (Jongbloed 2010, p. 30) suggests that "most nations realize that their already overstretched public budgets can no longer fully meet the financial demand of continuously expanding higher education systems" and a new way of financing is required. Jongbloed (2010) posits that "the European governments have shown a tendency to augment direct funding to the higher education institutions with competitive funding mechanisms and performance-based funding mechanisms such as contractual performance contracts" (p. 30).

2.9.2 Income Contingent Loans

According to Chapman (1997), "the Australian government in 1990 introduced its' first substantial charge for university tuition fees since the abolition in 1974 through income-contingent loans" (p. 738). This was necessary Chapman continues because of the "burgeoning demand for higher education financed also solely by taxation and most importantly the fundamental importance of not erecting financial barriers to participation in higher education for the economically disadvantaged" (p.738). Furthermore, the economic and social rationales for income-contingent charges in higher education are overwhelming as can be seen from the UK experience. In the

case of Australia Chapman (1997) argued: "that the income-contingent charges have not diminished access to higher education of the disadvantaged potential students" (p. 738).

Barr, Chapman, Dearden and Dynarski (2017) opine that "an income-contingent system, repayments instead are a percentage of the borrower's current income until he/she has repaid the loan. Further, in all income-contingent systems, payments are only taken after income reaches a threshold" (p. 3). Therefore, in an incomecontingent system, "the variable component is the duration of the loan, which is longer for borrowers with lower incomes. "They further argue, "that a well-designed income-contingent system can protect low-earning graduates from defaulting or experiencing financial distress while ensuring that taxpayer's subsidies are kept low" (Barr et al, 2017, p. 3). However, Johnstone and Marcucci (2006) are of the view income-contingent loans present "major complications not found with the conventional mortgage-type loans as there might be difficulty in precisely identifying and verifying the income to be taxed in order to arrive at the proper repayment amount" (p. 12). Pscharopoulos (1986) states that with these loans, students will enrol in courses which after their studies will earn them very high returns and thus increasing efficiency. On the other hand, Woodhall (2004) suggests "that this will improve participation rates among the economically less privileged in the society since they pay less or nothing of their study" (p. 3.) Johnstone (2005, p. 3) further argues, "that any effective loan scheme should be large needs based in order to promote equality". Barr (2008) suggests "that in most developing countries, loan schemes face challenges such as poor recovery rates, high migration rates of graduates and ineffective implementation and administrative policies" (p. 3). Additionally, Mingat and Tan (1986) point out "that the success of cost recovery of a loan scheme depends on the future incomes of graduates" (p. 3).

2.10 Financial Assistance Schemes

Governments have recognised that there is a need to provide some students with assistance because they are from low-income families and are unable to fund their tertiary education. These included Government Grants and Scholarships, tax benefits,

student loans, the fixed schedule or conventional mortgage-type student loan and means-testing.

2.10.1 Government Grants and Scholarships

Most countries provide non-repayable aid to students outlining the criteria which must be met to access these loans and which expenses are covered. According to Salmi and Hauptman (2006), "grants and scholarships are granted in two basic ways: direct and indirect provisions and in France and in most Francophone countries, eligible students receive the money directly from a specialised government agency" (pp. 30-31). Complementary to the introduction of a loan scheme of any form has been the introduction of grants and scholarships. In Barbados, the same obtains where students who have excelled in particular disciplines are awarded scholarships and exhibitions (Education Act, Cap 41). These awards are granted both on a need and merit basis and are intended to increase access amongst low-income students. Munene and Otieno (2008), note that "these schemes can be problematic in relation to the selection process, which is sometimes plagued with corruptive practices such as grants being awarded on a who-you-know basis" (p. 3).

2.10.2 Tax Benefits

According to Sami and Hauptman (2006), "An increasing number of countries are providing tax-related benefits to families or students for tertiary education expenses. The tax benefit may be in the form of a credit against tax or a deduction from income for either current expenses or savings for future expenses" (p. 32). Salmi and Hauptman (2006,) further point to the fact that tax benefits are provided in the "form of family allowances for students attending tertiary education" in Austria, Belgium and France (pp. 33-34). Turner (2016) advances "that tax benefits for post-secondary education in the US take the form of credits, deduction and income exclusion" (p. 4). However, Saunders and Lower-Basch (2015), state "that these benefits go to students from higher-income families who are already most likely to attend higher education institutions" (p. 1).

2.10.3 Student Loans

According to (Johnstone 2006), in order "to mitigate the negative impact of tuition fees and other cost-sharing mechanisms on the especially poor student, various loans

and grant schemes have been introduced across many developing countries." (p. 3). Marcucci (2013) suggests that student loans may be offered by the government to needy students who would not be able to access loans from commercial banks. Further, Johnstone (2006) hypothesises that student loans schemes have several aims including putting money in the student's hands and supporting financially needy students in a way to expand participation. Salmi and Hauptman (2006, p. 34-35) assert, that student loans "may take two basic forms, the Fixed-Schedule or Conventional Mortgage-Type Loan, or The Income Contingent Loan".

2.10.4 The Fixed-Schedule or Conventional Mortgage-Type Student Loan

According to Johnstone and Marcucci (2006), "the fixed-schedule or conventional mortgage-type loan carries a fixed rate of interest which may be fixed or variable, linked to the government's borrowing rate or the prime commercial rate, a repayment period which is the amount of time the borrower has to repay and the repayment terms, which specify whether the payments are to be in equal monthly instalments" (p. 10). Salmi and Hauptman, (2006), contends that "as a way of providing borrowers of the mortgage-type loan with greater flexibility, some countries have introduced graduated payments; small payments at the beginning of the repayment period and larger towards the end of the loan" (p. 34).

In the US funding of higher education is based "on mortgage-type student loans these are repaid over a set period of time, which places high repayment burdens on low earning graduates" (Barr, Chapman, Dearden & Dynarski, 2017, p. 3). Further, Barr et al argue that the US loan system is in crisis with graduates owning \$1.3 trillion in student loans, with a high level of defaulters and person being in arrears. Johnstone (1997, p. 2) posits that a number of questions need to be addressed in between student or parent, taxpayer or philanthropist? The level of higher education, the cost and the quality should also be considered. Barr et al (2017) posit, "that a well-designed income-contingent loan can solve the extremely difficult circumstances for a majority of the graduates" (pp. 1-2).

2.10.5 Means Testing

Means testing is used by the government to ensure that students who are academically talented but are from families and who are financially disadvantaged and who don't

have the ability or the means to cover tuition and other fees associated with higher education are offered financial assistance. According to (Marcucci and Johnstone, 2010), means testing "refers to the assessed ability of the family (whether nuclear or extended) to contribute financially to the costs of tuition and other fees as well as student living" (p. 4). It must be noted that means is measured by an assessment of the difference between the family's income and the total costs of attending the higher education institution. This measurement determines those students who are offered assistance. According to Marcucci and Johnstone (2010 p. 1), "the success of the student assistance policies ultimately rests on fair and accurate means-testing that ensures financial assistance to eligible students and minimizes awards to non-poor students".

2.11 Conclusion

In this chapter, I sought to interrogate the literature relating to the financing of tertiary education. The human capital and social justice theories were examined against the policy of the Barbadian government to use these as development tools for the provision of free education for its population. However, because of the economic pressures, a shift in the policy position led to the introduction of tuition fees which led me to examine the literature on the alternative models of financing tertiary education. The unintended outcomes of the new policy; however, might result in inequality if those who cannot afford to pay are left out of university education and this can exacerbate inequality in the society. This makes it imperative that the apprehensions, views, perceptions and perspectives of diverse categories of participants are captured on alternative mechanisms preferred by the majority of stakeholders.

Now that the literature on the various models of financing tertiary education has been interrogated, attention will be drawn to the methodology employed in the study to capture the views and perception of the participants in the study on the financing of tertiary education in Barbados.

CHAPTER 3 METHODOLOGY

3.1 Introduction

Several factors were considered to determine the strategy for this research. One of the most critical was that I acknowledged that the successive Governments have recognised "that access to education at all levels has been a key factor in the success of Barbados as a society and an economy". The contribution of education to Barbados's social and economic development has been a reference point for many generations as the economy moved from mainly agrarian to service-based. With a particular focus on access to tertiary education, there was a substantial and reasonable viewpoint that government-funded tertiary education contributed to sustained economic growth.

This general perspective invoked the consideration of the role of beneficiaries of government-funded tertiary education to this research. The participation of this subgroup of the populace was also considered in the context of the notion that Barbados should invest in the education of "its greatest resource, its people," at all levels. Consequently, any change in the funding policy would have impacted Barbadian students, providers (some of whom themselves were beneficiaries), and the country, on personal, institutional and national levels respectively.

To obtain the information needed to effectively answer the research questions, this study, therefore, employed a qualitative approach. Creswell (2014) explains this approach as "a way of doing [research] that often involves in-depth interviews and/or observations of humans in natural or social settings" (p. 32). It was, therefore, essential to embrace key stakeholders in the tertiary education sector in Barbados. In particular, I viewed the University of the West Indies Cave Hill Campus as the main focal point for this study, given that its enrolment was characterised by a substantial percentage of its students being Barbadian nationals. The high enrolment of Barbadian nationals in pursuit of tertiary level qualifications was considered largely due to the government's policy of financing Barbadian students. This resulted in the

UWI receiving significant income from the Government's investment in the education of its citizens over the years.

It was realistically anticipated that changes in government financing of tertiary education by the Barbados Government would have significantly affected the UWI because of its long-term courtship of primarily Barbadian nationals enrolled at the UWI (See Table 6), and the ultimate reliance on the financial gains associated with Barbadian students. Specifically, because of its relationship with the Barbados Government, UWI then stood to be more impacted by any change to the level of financing, more so than any of the other three tertiary institutions.

Table 6: Enrolment of Barbadian Nationals at UWI, Cave Hill Campus

Enrolment	2009/10	2010/11	2011/2012	2012/2013	2013/2014
Barbados	6756	6989	7,170	7,118	7,019
Total	8,342	8,674	8,841	8,776	8,634
% of Total	81.0%	80.6%	81.1%	81.1%	81.3%

Source: The University of the West Indies Statistical Review, 2009/10 to 2013/14

This chapter begins with an outline of the research approach. It will also include a detailed explanation of the case study, and interview and sampling procedure models that facilitated the collection of information. I will also explain the process of utilising research sites, selecting informants to support information gathering, and conducting the data analysis.

3.2 The Research Approach

3.2.1 Qualitative Approach

According to Creswell (2014) "a broad research approach is the plan or proposal to conduct research, which involves the intersection of philosophy, research design and specific model" (p. 3). Hence in planning a study, consideration must be given to the researcher's philosophical underpinning "that are brought to the study, the research design that is related to this philosophical worldview and the specific models or procedures that translate the approach into practice" (Creswell, 2014, p. 5).

The philosophical frame used in this study is social constructivism because of the interest in understanding the meaning people make of their world and the experiences they have in that world (Merriam, 1998; Creswell, 2014). "Social constructivists believe that individuals seek understanding from the world in which they live and work" (Creswell, 2014, p. 8).

Crotty (2014) suggest that "the goal of the research that uses this philosophical frame is to rely as much as possible on the participants' views of the situation being studied" (p. 9). This research lent itself to this construct because I sought to gain information about the views and perceptions of the participants on the financing of tertiary education. I did not state a hypothesis or a theory as in post-positivism and then set about to test the theory or hypotheses. Rather I sought to develop the meaning from the data collected in the field during interaction with the participants. The study is "therefore qualitative study where the key concern was to understand the participants' perspectives, not the researcher's" (Merriam, 1998, p. 11). A case study was therefore chosen as the design for the research.

The notion of government-funded tertiary education contextualised this study. I argue that continued increases in student enrolment will drive the need for transformation of funding models, to guarantee the availability of advanced knowledge and skills to meet the labour market demand both locally and internationally, without contributing to sustained increases in the debt and deficit. The questions that framed this study were:

- 1. What are the perceptions of policymakers, University Administrators, informed specialists, senior public administrators, students and parents on financing tertiary education at the University of the West Indies, Barbados?
- 2. What do the majority of participants' view as the best options for financing tertiary education at the University of the West Indies, Cave Hill, Barbados?

3.2.2 Justification of the Qualitative Research Approach

Boxill, Chambers, and Wint, (1997), suggests "that qualitative research allows for a rich, comprehensive, in-depth investigation and assessment of issues being researched" (pp.44-45). Boxill et al (1997) further suggested: "that this model of

research can stand on its own and form complete data gathering techniques, or can be used at different phases of the investigation" (p. 46). Though earlier research has highlighted subjectivity, and the "lack of formal theoretical and operational guidelines, which limits the respectability afforded its models" (Boxhill et al, 1997, p 46) as shortcomings of this approach, the approach will fully accede to the ethical obligations and diversification to ensure that the confidentiality and perspectives of all key stakeholders are maintained, obtained and evaluated respectively. Issues of the complexity of organisation and analysis of information will be addressed through the use of an advanced technological qualitative analysis tool Dedoose.

3.3 Research Design

3.3.1 Documentary Review

According to Stake (1995) suggests that "gathering data by studying documents follows the same line of thinking as observing or interviewing" (p. 68). He further states that "documents serve as substitutes for records of activity that the researcher could not observe directly" (p. 68). The primary documents reviewed provided information on policy relating to the financing of tertiary, educational digests to ascertain the enrolment of Barbadian students at the UWI and the associated costs.

Some of the documents which comprise the data for my study were obtained from the relevant units in the METI. Written requests were made to the relevant units with the copy of the letter authorising the conduct of this research to these units. These documents were examined primarily in the context of implications for the UWI. Ultimately, my role in this form of inquiry was in the "constructing and coconstructing of the meaning of the process, viewpoints, thoughts, feelings, and experiences of the participants as these relate to the phenomenon under study" (Johnson and Christenseen 2000 p. 207).

The use of document review also provided an opportunity for insight into various themes surrounding the financing of tertiary education.

3.3.2 Literature Review

To identify the extent of existing research on financing tertiary education in Barbados and Internationally, the researcher explored various databases for research articles and texts. Specifically, the literature review sought to review discussions on the trends in the models used in financing tertiary education.

The main repositories of online information explored were Sheffield Library, Ebsco Host and ERIC. Significant effort was made to obtain literature which broadly related to financing tertiary education. A special effort was also taken to trace previous research which focussed on tertiary education in Barbados. The main terms used centred on the keywords and phrases of this study. These included inter alia financing tertiary education, models of financing tertiary education, public financing of tertiary education and tertiary education.

3.3.3 Case Study Research

A case study is a form of qualitative research design that looks in-depth at a contemporary issue experienced by a group of participants within a specific context (Merriam, 1998; Yin, 2009). Yin (2014, p. 16) states that "a case study is an empirical inquiry that investigates a contemporary phenomenon (the case) in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident". Gerring (2004) defines "a case study as an indepth study of a single unit (a relatively bounded phenomenon), where the aim is to elucidate features of a larger class of similar phenomena" (p. 341). Stake (1995) categorises "case studies into three types, the intrinsic, the instrumental and the collective" (p. 3). In the intrinsic case study, the researcher has a genuine interest in a particular case while in the instrumental case study design, there is a need for the researcher to have a general understanding of an issue and therefore is of the opinion that understanding might be forthcoming by studying a particular case. However, in the collective case study, the researcher selects multiple cases to study the phenomenon but there is coordination between the individual cases.

Crossley and Vulliany (1984) suggest that the main strength of case-study techniques as a research methodology lies in their maximisation of ecological validity of data" (p. 198). Moreover, case studies "are of value in refining theory and suggesting

complexities for further investigation, as well as helping to establish limits of generalizability...and can be a disciplined force in public policy settings" (Stake, 1998, p. 104).

However, there are concerns which have arisen about the case study as a distinctive form of empirical inquiry. These concerns according to Yin (2014) include rigour and generalising of results from a single case. Crossley and Vulliany (1984) proffer "that the lack of apparent rigour in data collection in much case-study research is frequently a basis for an accusation of bias and for concern over the lack of generalisability of findings" (p. 203). Yin (2014) states that in "doing case study research the goal is to expand and generalise theories [analytic generalisations] and not to extrapolate probabilities [statistical generalisations]" (p. 21). In other words, the case study does not represent a sample. Crossley and Vulliany (1984) suggest that "ethnographers have developed a range of techniques, such as analytic induction, theoretical sampling, triangulation, progressive focusing and reflexivity to enhance the reliability and validity of data" (p. 203).

I classify my research as an instrumental case study where the UWI, Cave Hill Campus is the case. The purpose of the study was to document the perspectives of stakeholders on the financing of higher education at the UWI, Cave Hill, Barbados on the pre and post changes to the financing of tertiary education. The study also investigated the level of support for alternative financing models as proposed by the participants. The outcome of the deep inquiry that captured the choices of the participants can be powerful instruments that policymakers might listen to even, as the implementation of the new policy takes effect. The findings may, therefore, be important in catalysing any review of the policy later in the future.

3.4 Data Collection

3.4.1 Sampling Procedures - Purposive Sampling

Purposive sampling was used to select key stakeholders to participate in the study. This type of sampling was used to select individuals based upon their specialist knowledge of the research issue, and their capacity and willingness to participate. At

the administrative level, selected members of the management team and faculty of the University of the West Indies, Cave Hill Campus were carefully chosen to essentially provide the institutional perceptions of impact to the campus, while policymakers and public officers from the Ministry of Education, Science, Technology and Innovation provided the public policy notion of the funding change. The sample also included an informed educational specialist and three focus groups of students and parents.

3.4.2 The Interview Models

3.4.2.1 Individual Interviews

One of the main models of information collection used in this study was individual interviews. According to Yin (2014), the use of interviews and observation seeks to develop thick descriptions of the settings or the phenomenon in question. The interview model was utilised because of the ontological view that people's knowledge, views and understandings are meaningful and the epistemological position which recognises that talking to people in a meaningful way of generating information.

According to Patton (2002) "a qualitative interview should be open-ended, neutral, sensitive and clear to the interviewee" (p. 721). The interviews though guided by an interview instrument, also allowed for flexible conversation. The interviews took place approximately three months after the introduction of tuition fees and so, participants freely expressed their views on the fee-paying structure and more so, the intrinsic and burning concerns. The questions included in Appendix 1 were "designed to elicit detailed, concrete stories about the subject's experiences" (Whyte, 1982, p. 958).

One-on-one interviews were conducted with nine persons in the various departments of the UWI, the Ministry of Education, Science, Technology and Innovation and an Educational Specialist. Although Sarantakos (1998) highlighted the time-consuming nature of interviews, this model provided the opportunity for the collection of rich information regarding the change to the government's policy of financing tertiary education.

3.4.2.2 Focus Groups

Additionally, three focus groups: two for students and one for parents (3 persons in each group for a sample of 9) were conducted using a set of open-ended questions. Focus groups are "composed of relatively homogenous groups of people with one or more characteristics of interest to the researcher" (Hughes and DuMont, 1993). "The main advantage of a focus group was the opportunity to observe the group interaction on a particular topic" (Morse and Field, 1995, p. 722). From a domestic viewpoint, focus groups for students and parents were employed to obtain opinions on the impact of the current model of financing tertiary education, their views on the strengths and weakness of the model, their views on the contribution of the current financing model to the development of Barbados. They were given the opportunity to suggest alternative funding models and give reasons for the alternatives. In all, eighteen persons were selected as the sample for this study, nine participants for the three focus groups; three in each group and nine individual interviews.

3.4.3 Site Selection

The sites selected for the interviews with the participants were determined by the participants, based on their schedules. Most of the interviews were conducted at the METI and the UWI. At the Campus, the spaces used were mainly the offices of the participants, and which offered the interviewee a significant level of comfort. The use of a conference room at the METI provided a relaxed setting, devoid of any distractions.

3.5 Participants

The participants in the study were as follows:

3.5.1 Policy Makers

The policymakers in the sample were selected to ensure that the views of the political directorate, those who are ultimately responsible for the policy decisions were obtained. Since the change in the funding policy would have been as a result of governmental considerations, the inclusion of two policymakers in the sample was to gain a better understanding of the rationale for the change in the funding policy.

3.5.2 Public Officers

The role of Public Officers is to implement the policies as articulated by the policymakers. In Barbados, a Public Officer is defined as "the holder of any public office and includes any person appointed to act in that office" where the public office is "any office of emolument in the Public Service," (CAP. 29, Public Service Act, 2009 p. 6). These participants were therefore selected to allow me to evaluate their views while being very conscious that their role is to implement policy, irrespective of their personal opinions.

3.5.3 Parents

The Parent focus group consisted of three parents of students enrolled at the university. These parents were all females, between the ages of forty-five and fifty. Approaches were made to male parents but they declined to participate. Two of the parents were employed in the public service: one as an Executive Secretary and the other as a Security Guard. The other parent was employed at an International Organisation. These parents have students who were in the faculties of Law, Medicine and Social Sciences. They were selected because the tuition fees implemented in the faculties of Law and Medicine were the highest at the university and it was important to glean from them, their perceptions on the change in the funding policy. The parent of the student enrolled in the Faculty of Social Science was chosen because of the parent's experience working in education and her familiarity with policy changes over time.

3.5.4 Students

The sample of students for the study was selected from the population of students from the various faculties of the Cave Hill Campus of the University of West Indies. The population was divided into four strata consistent with the faculties found at the University of the West Indies, Cave Hill Campus. Each faculty was further subdivided into two according to the registration status of the students. Hence, one group comprised students who are pursuing Full-Time courses and the other group comprised those who are pursuing courses on a Part-Time basis.

The Full-Time students were selected from the Faculty of Medicine and Social Science. Three students constituted the sample of Full-Time students: one was from the Faculty of Medicine and two were from the Faculty of Social Science. Two of these students were in their second year and one was in their third year. Three students constituted the sample of Part-Time students with one of these being selected from each of the Faculties of Social Science, Humanities, and Science and Technology. The part-time student from the Social Science Faculty was a student in the third year of study. The student from the Faculty of Science and Technology was in the second year of study; while the student from the Faculty of Humanities was a doctoral student in the first year. There was a mixed sample of male and female students with ages ranging from nineteen to forty-five. The six students were then assigned to two focus groups based on their registration status.

3.5.5 University Administrators

The selection of the sample from within the University of the West Indies, Cave Hill Campus was made from the management team of the campus. This selection comprised of the representatives of the highest offices at the campus and one Senior Lecturer in the faculty of Social Sciences.

One of the strategic reasons for engaging the representatives of the highest offices was because the views held by holders of these offices on the impact of the policy change at the Cave Hill Campus would be critical for this study. Specifically, the views were also sought since it was perceived that this policy change could have an impact on the student enrolment and the viability of the university. Additionally, one senior manager, in particular, was engaged since the change would impact a vision held regarding one graduate in every household. It was also pertinent to hear what alternatives for financing university education would be suggested by the representatives of the UWI.

The Dean was chosen to represent all the Deans in the other faculties. As a member of the management team of the campus, this Dean is well placed to speak on behalf of the others. The University Official who managed data collection on student enrolment was selected because this official could provide a rich source of the information on trends in student enrolment prior and post-policy change.

3.5.6 Education Specialist

One education specialist from an international organisation was also included in the sample. This was because of his vast experience in the field of financing of tertiary education, and his extensive research on the different models of financing tertiary education. The selection of this participant allowed for an international perspective to be brought to bear on the research.

The table below outlines the participants, the various roles of the participants, their gender and the pseudonym used in the study.

Table 7: Various Roles of Participants

Participant	Participant's Role	Gender	Pseudonym
Policy Makers	To provide the views of the political	M	Mr Cave
	directorate	M	Mr Richards
Public Officers	To provide the opportunity for the	F	Ms Seale
	evaluation of the views of those who	M	Mr Haynes
	implement policy, irrespective of their		
	personal opinions		
Parents	To ensure the perceptions of the impact of	F	Jane
	the change in the funding policy on the	F	Marcia
	household income	F	Sheila
University	To provide an in-depth perspective	M	Dr Fields
Administrators	(practical and theoretical) of the financing	F	Dr Lynch
	of tertiary level education from the supply	M	Mr Kent
	side	M	Professor
			Harris
Students	To provide perceptions on the impact of	F	Mrs Smith
	the change on their ability to complete	F	Karen
	their programmes and the prospect of	F	Keith
	earning a university degree	M	Liam
		F	Jasmine
		M	Andrew
Education	To provide explicit knowledge of research	M	Dr Manning
Specialist	on the different models of financing		
	tertiary education		

3.6 Ethical Considerations

3.6.1 Access to Research Sites and Informants

In line with the established research procedures of the University of Sheffield, an Ethics Application Form was submitted to the university seeking permission to conduct the research. Approval was granted from the relevant authorities to conduct this research. Permission was sought from the Permanent Secretary, Ministry of Education, Science, Technology and Innovation (METI) to conduct the study. Permission was also sought from the Principal, the University of the West Indies to gain access to the research site and to the participants on the campus. An informed consent form was developed stating the rights of the participants, their agreement to be involved in the study and the assurance that their rights will be protected.

The research proposal and tools were deposited with the University of Sheffield, School of Education and so that the proposed methodology was clear to the authorities as they consider granting the license to do the research. I took the time to explain the purpose and intent of the research to the participants and sought their consent before participating. The participants who agreed to be involved in the study were given a participant sheet to read and a consent form included at Appendix 2, to complete and sign. Participants were informed of the duration of the interviews which lasted no longer than forty-five minutes.

3.6.2 Problems I Encountered

I encountered problems in scheduling especially with the focus groups, the management team of the UWI and the policy implementers. It was difficult to get a time where members of the focus groups were available. These problems were solved by arranging the interviewing time outside normal working hours and on weekends.

3.6.3 Establishing Credibility

Eisner (1991) and Lincoln & Guba, (1985) argues that the gauge of a qualitative study is based on the researcher's believability, coherence, insight and instrumental utility and trustworthiness. To ensure credibility, the study placed significant importance on

the use of triangulation, further defined as converging different sources of information by Merriam (1998); and for the duration of the study, sustained researcher's involvement (Lapan et al 2012).

To minimize any interference by biases and assumptions held by the researcher owing to prior knowledge and views on tertiary education and its funding, the suggestion by Lapan et al (2012) that awareness and documentation of self-perceptions, beliefs and biases were observed. The information collected was presented as recorded, no attempt was made to alter the findings (Yin, 2014).

This strategy was thought to be appropriate as according to Unluer (2012), "researchers who undertake qualitative research take a variety of member roles when they are in the research setting. These roles range from an insider to an outsider" (p. 1). While these roles are defined in a variety of ways, Breen (2007) described "insider-researchers as those who choose to study a group to which they belong, while outsider-researchers do not belong to the group under study" (p. 163).

Arguably, though, Breen's (2007) classification of insider-outsider researcher is not clearly delineated in this instance. McNess, Arthur and Crossley (2015) suggest that "researchers are both inside and outside the learning environment and inside and outside of the phenomena under investigation" (p. 311). They further argue that research may require that "we distance ourselves and yet at the same time to become immersed. We are neither complete observers nor complete participants, but often working in that 'third space' in-between" (p. 311). The interactions with policymakers for the purpose of information collection took the insider perspective since I am also at the policy-making institution at a policy-making level. The interactions with the students were therefore from an outsider perspective. However, based on the position proffered by McNess et al (2015), I consider myself to be working in a third space where the boundary of insider and the outsider is penetrable.

Nevertheless, among key considerations in the conduct of research also included objectivity, use of correct methodology sound tools, and adherence to ethical processes.

3.7 Data Analysis

The taped interviews were transcribed verbatim using Microsoft Word. The content of each interview was analysed using Dedoose, a web-based application for analysing qualitative data. The Code Tree was initially developed using key terms from each item on the interview instrument to define and develop the parent codes. Saldana (2013) referred to Trede and Higgs (2009) who suggested that "research questions embed the values, world view and direction of an inquiry" (p. 18). They further posited that "ontological questions address the nature of participants' realities" (p. 18) and this pointed me to the use of research question alignment as part of the first coding cycle.

During initial coding, the argument of Lapan et al (2012) tends to suggest that the initial codes should focus on the main idea with the opportunity for further exploration. For example, the parent code, strengths of the current model of financing university education mirrored the actual Question 3 to more broadly obtain the strengths of the particular model of tertiary education financing. Glaser (1978) hypothesises that during initial coding researchers seek to categorize statements based on what they reveal. The initial coding approach used was therefore geared to collect the statements which would define the broad views of the participants. Specifically, information from the transcripts of the individual and focus groups interviews were coded by assigning keywords to these parent codes. During this process, codes were strategically reorganized to ensure that the codes which best represented the information collected were maintained, and there were no gaps in data obtained.

As views converged or diverged, child codes were created to capture specific emerging themes about various aspects of the focus of the study. During the second coding cycle, specific essence-capturing information was assigned to the subcategories using the theming the data process. Using the example from the foregoing paragraph, as the transcripts were reviewed, it became apparent that the statements relating to the strengths of the respective model could be captured within sub-sections of the broader category of strengths. As transcripts were reviewed similar views were identified. This led to the broad category of strengths (of the funding model) being

more granularly defined into sub-categories such as contribution to national development, contribution to socio-economic development and ensuring quality assurance [of tertiary education programmes]. These two levels of codes accommodated some one hundred and twenty codes with several pages of excerpts. An example of the excerpts is shown in Figure 2. Cross-cutting issues were also coded, to ensure comprehensive consideration of pertinent topics concerning the research.

Title: IS_Dr Manning.docx

Doc Creator: Kbest Doc Date: 1/21/2017

Descriptor Info: Group Classification: xx Age: xx Gender: Male Codes Applied: Contributes to National Development Educated and

Skilled Labour Force Economic growth

Excerpt Creator: Kbest

Excerpt Created On 1/28/2017

Excerpt Package: 3129 Excerpt End: 3722

The strengths of the model are that one, by heavily investing in higher education you create a critical mass of highly specialized persons in the fields of medicine, engineering, law, actuarial science, architecture, education, theology and all that and the development of a country is positively correlated with the levels of education. So, a natural advantage of that in that in having the requisite infrastructure in place, which is the human resources that make up everything, in this case, human capital Barbados, positioned itself on a growth path on a development path, not a growth path.

Title: IS_Dr Manning.docx

Doc Creator: Kbest Doc Date: 1/21/2017

Descriptor Info: Group Classification: xx Age: xx Gender: Male Codes Applied: Economic growth Socio-economic Development Contributes to socio-economic development Contributes to National

Development

Excerpt Creator: Kbest

Excerpt Created On 1/28/2017 Excerpt Package: 10784 Excerpt End: 11475

The second thing in terms of this pool of human resources created. What is the difference? cause they pay tax! That is a significant contribution to the government these are people who are able to spend on luxury goods which are highly taxed so not only are their income taxed but the luxurious lifestyle adds to those benefits to the economy. I mean look at its tax on vehicles in Barbados is one of the highest in the world. but people will not stop buying! And that is beneficial to the government that is because the government knows it raising four hundred thousand dollars from the middle of last year, that is because it is having this money that is coming from taxes.

Figure 2: Coded (Excerpts)

A unique identifier was assigned to each of eighteen (18) participants to maintain control of information collected from the various stakeholders. For authoring, a pseudonym was assigned to ensure the anonymity of the participants. See Appendix 4

The qualitative research tool Dedoose provided several display models which guided the analysis process. These displays included the packed cloud chart which allowed for easy identification of significant elements of interest as well as frequency charts which provided the number of excerpts applied across codes, and across descriptors such as by stakeholder group or gender. Figure 3 shows the participants proportional representation while Figure 4 shows the packed cloud which shows by size the occurrence of the codes. The more the code is applied the larger the size of the text in the packed cloud, for example, the large size of the text of Socio-economic Development. In addition, excerpts were exported to Microsoft word and charts to Microsoft Excel for easier manipulation. An example of the excerpts is shown in Figure 2.

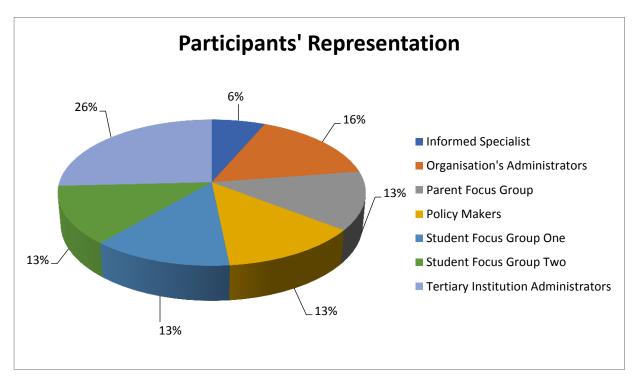


Figure 3: Participants' Representation



Figure 4: Pack Cloud

3.8 Presentation of findings

The results of the study have been presented in descriptive, narrative form. To answer the first main research question, information was solicited from the responses to eight (8) auxiliary questions. This information was central to determining the strengths and weaknesses of the model of funding tertiary education at the University of the West Indies, Barbados prior to September 2014. A further seven (7) auxiliary questions were used to determine the options for financing tertiary education, perceived to offer greater benefits to stakeholders. A copy of the interview instrument is found in Appendix 2.

The use of charts, tables and figures were used to support the text. While Miles and Huberman (1994) observe that narrative text is a weak and cumbersome form of display, I do not agree as complementing such narratives with other presentations

modes enriched the data and gave effective meaning to data and information. Additionally, selected quotes from the interviews and focus groups that add value, stress-specific points, bring out issues and are authoritative and convincing were used.

3.9 Conclusion

The research methodology chosen created the opportunity for a meaningful understanding of the impact of the change to public financing of tertiary education, through enquiry and analysis of the views of the participants. I subscribed to the qualitative approach given the inherent characteristics of a small island developing state such as Barbados. Education drives social and national development. Education requires investment, either by the student, by government funding or through a combination of public/private/individual contributions. It is within this context that this research was conducted and the results analysed. The literature review, interviews and document review yielded various types of information which could then be examined, cross-referenced and validated. According to Lapan et al, 2012, the multistrategy approach to the study should improve the level of transferability and dependability.

I will now in the next chapter discuss and present the views of the participants emanating from the interviews.

CHAPTER 4 PRESENTATION OF FINDINGS

4.1 Introduction

This Chapter presents the views of the participants on state-funded education in the pre-September 2014 and post period. Participants were given the opportunity to present their opinions on the model of financing introduced in September 2014 and models which they deem more applicable to the Barbadian context. The findings of the study as they relate to the perceptions of stakeholder groups will also be compared and contrasted with the findings on the various models of financing of tertiary education internationally.

The first research question sought to capture the views of the participants on the traditional and current model of funding tertiary education. The participants listed several benefits which resulted from state-funded tertiary education. These benefits included the formation of a political class which has led to home-grown politicians, a highly skilled labour force and upward social mobility through obtaining qualifications which ensure employment in higher-paying jobs. One of the most referenced perceived benefits of the models of financing tertiary education prior to the introduction of the fee-paying model in September 2014 was that government-financed tertiary education significantly contributed to the socio-economic development of individuals. There was also consensus that the traditional model of state-funded tertiary education has also been responsible for the rise from the lower socio-economic status of the majority of the Barbadian population to the point where there is a growing middle class. The offering allowed for more persons from the lower socio-economic status to access this level of education, and qualify and improve their socio-economic status.

The second research question sought to ascertain from the respondents the best options for financing tertiary education provided. The respondents provided a number of alternative models. These models included: financing through increased taxation, the establishment of a Tertiary Education Fund through a Levy, conditional government financing which allows for the government to sponsor individuals based

on labour market demand, socio-economic status or student performance, mixed model or cost-sharing financing, payment plans and personal financing through Insurance or Investment Schemes for Education.

As alluded to earlier, Barbados, from the post-independence period, placed significant emphasis on the education of its nationals, and for this reason, the provision of education has been largely centralized within the public sector. The organization of higher education in Barbados was similar to that of France, which Giddens (1993) described as being "organized nationally, with centralized control being almost as marked as in primary and secondary education" (p. 430).

Public financing of tertiary education in Barbados not only provided the opportunity for more individuals to develop their abilities and aptitudes at higher levels but was more strongly seen as a means of equalization of the opportunities for socio-economic development, especially for the underprivileged masses.

According to MEHRD (2012)

Tertiary education in Barbados has long been viewed as the nucleus and seedbed of development and sustainability in the nation-building project. It is a contribution in teaching, learning, innovation and research, civics, culture, and to the values vernacular that constitutes the nation. The professional transformation of human resource has been the critical factor driving economic sustainability. This understanding has served to elevate tertiary institutions as development tools within the public imagination. The legacy is long-standing and respected" (p. 11)

The practice of [state-funded tertiary education] has also demonstrated that the Barbados Government has embraced the theory of human capital which as stated by OECD (2003) is a key determinant of economic growth and facilitates the creation of personal, social and economic well-being. The main argument of the proponents of the human capital theory is that "education increases the productivity and efficiency of workers by increasing the level of cognitive stock of economically productive human capability which is a product of innate abilities and investment in human beings," (Olaniyan and Okemakinde2008, p. 479).

The role of the UWI is therefore evident. According to MEHRD (2012 p. 35), "The University of the West Indies (UWI) was founded in 1948 as the nucleus of a dream to bring "light, liberty and learning" within the reaches of the people of the Caribbean. The UWI is the largest and most longstanding, higher education provider in the English-speaking Caribbean, with main campuses in Barbados, Jamaica, Trinidad and Tobago and Antigua and Centres in Anguilla, Antigua & Barbuda, The Bahamas, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Montserrat, St Christopher (St Kitts) & Nevis, St Lucia, and St Vincent & the Grenadines."

The purpose of this study was to obtain the perceptions of key stakeholders on the financing models of tertiary education at the University of the West Indies. Additionally, given Barbados' social and economic conditions, the study sought to explore the options for financing tertiary education at the University of the West Indies, Barbados, which were most favoured by the participants of this study.

The following research questions framed the study:

- 1. What are the perceptions of policymakers, University Administrators, informed specialists, senior public administrators, students and parents on financing tertiary education at the University of the West Indies, Barbados?
- 2. What do the majority of participants' view as the best options for financing tertiary education at the University of the West Indies, Cave Hill, Barbados?

4.2 Findings

4.2.1 Funding for Tertiary Education in Barbados

The participants in the study overwhelmingly acknowledged that the financing for tertiary education in Barbados was provided by the government. Approximately ninety-four (94%) of the participants indicated that university education was financed by the Government of Barbados. See Figure 5. This was through revenues collected by taxation. Additionally, 6% of the participants thought that university education was financed either by parents or Government.

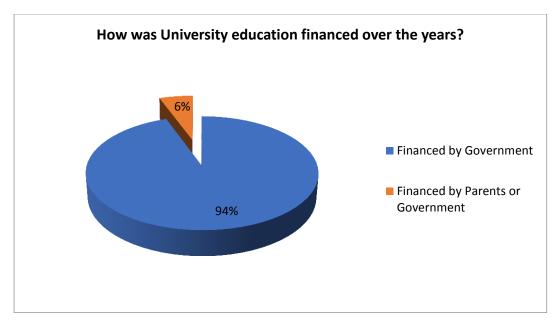


Figure 5: How was university education financed over the years?

In the sub-Saharan countries, the state provides over 90% of the funding for higher education programmes for its citizens (Teferra, 2007). The financing of tertiary education programmes for Barbadian nationals was similar to the traditional United Kingdom model. Because of the deliberate policy to invest in the human capital by providing education and training opportunities, governments provided a 100% public subsidy to eligible tertiary level institutions.

Barr (2011) notes that "it is efficient to devote resources to tertiary education, to the point, where their marginal social value equals their marginal social costs." Barr (2011, p. 25) further points out that "countries typically pursue three goals in higher education: larger quantity with good access, higher quality, and constant or falling public spending," of which, "it is possible to achieve two but only at the expense of the third." In the context of Barbados, public financed tertiary education allowed for continued and significant increases in enrolment of Barbadian students (access) to high quality (accredited) programmes, but fiscally expensive as in the case of Scandinavia, (Barr 2011).

The fiscal implications of public financed tertiary education over time, therefore, resulted in the accumulation of large debt to the University of the West Indies. The debt situation to the UWI reflected the changing macroeconomic state of the country

given the "competing fiscal pressures" associated with the provision of health and social services and globalization (Barr 2011). Over the years, the main consumption of public financial resources reflected the priorities relating to the provision of education and health services, with education consistently receiving the second largest portion of the government's resources. With dwindling financial resources, debt to the UWI continued to increase as the government grappled with declining revenues. A major challenge for Barbados economy too was that the worldwide economic downturn affected tourism which is the mainstay of the economy and therefore providing a fully free public education system was unsustainable and would call for some realignment in terms of policy options.

4.3 Benefits of Government-Funded Education

The participants cited several significant benefits which were perceived to be as a result of state-funded tertiary education. These included but were not limited to national development primarily through the creation of a highly skilled labour force, political development, and upward social mobility through employment in higher-paying jobs as a result of access to state-funded tertiary education.

Responses from participants on the benefits of public-financed tertiary education encompassed both private and social returns to the human capital formation. Fagerlind & Saha (1997) opine "that the human capital theory provides a basic justification for large public spending on education" (p. 107). According to Riddell & Sweetman (2004), private returns are the "costs incurred by and benefits received by the individual acquiring the education while social returns are based on the costs incurred by and benefits received by the society as a whole" (p. 3).

4.3.1 The Pursuit of Social Development

From the analysis, most of the participants in the study appeared to strongly agree with this philosophy, and that contextually speaking, state-funded university education for those who desired to pursue this level of education facilitated the flight from poverty in Barbados.

In Barbados, the perceptions of government-financed tertiary education post-2014 are entrenched in the historical belief that education is a vehicle for social and economic development. Giddens (1993) specifically pointed out that it has been argued that "Universal education will help reduce disparities of wealth and power by providing able young people with skills to enable them to find a valued place in society" (p. 430)

Professor Harris, a senior administrator of the University of the West Indies provided quite an in-depth historical perspective of the role of public-financed tertiary education in Barbados and informed that:

At the dawn of the 20th century, the black community in Barbados was arguably one of the poorest black communities in the Caribbean. The black community in Barbados came out of emancipation in 1838 as the most disenfranchised of all of the black communities. Remember that in Guyana, in Trinidad, in Jamaica, in the neighbouring Leeward Islands, St Vincent, Grenada, St Kitts, Dominica, the ex-slave population acquired land as part of their development. So, the typical family in St. Lucia, the typical black family in Jamaica, Guyana and Trinidad had access to land, they became small farmers, they became peasants. Many of them owned over 50 acres of land and peasantry of farmers developed. Now, in Barbados, this did not happen. The black population emancipated on a Friday, went back to work on a Monday, working for the same plantation owners and the same estates which meant that the Barbadian blacks were the only ones in the region who received what we call landless emancipation. In the 20th century, the Barbadian community was made up of a large class of property owners and a massive class of agricultural labourers. Barbados did not come into the 20th century with a black middle class, the other countries did. So our only path out of poverty and mobility that was secure and guaranteed was through higher education and therefore the middle class that we have in Barbados today - the black middle class - is the middle class that has been created by higher education and principally, by higher education (Professor Harris, Tertiary Institution Administrator, January 29, 2015).

The provision of state-funded tertiary education was also associated with earlier post-independence policy initiatives for basic education. Dr Lynch, a senior lecturer of the UWI rationalized that:

Free tertiary [education] came out of the initiative launched by Errol Walton Barrow in terms of making education a major priority in Barbados. So, in his effort to establish the black Barbadian in terms of some type of power in this country and some type of leadership in this country, he looked at education as the primary way to get them where they could be self-actualizing (Dr Lynch, Senior Lecturer, November 11, 2014).

Mr Kent, another lecturer also expressed the view that access to public-financed education acted as a support mechanism to the provision of free basic education by allowing students to further acquire knowledge and skills at the higher level, a prospect which was largely veiled to most adults up until late 1900. This respondent believed that:

Another way is again looking at the weakest links in society just in terms of socio-economic status whereby these are children and parents who, parents who might not have down an education but the government attended to their children to allow them the opportunity to actually advance in society way beyond their parents' station so economically that was another - the growth in human capital is extraordinary because of the free tertiary education (Mr Kent, Senior Lecturer, December 17, 2014).

Dr Lynch and Mr Kent both believed that access to government-financed tertiary education, therefore, provided the opportunity for an increase in the number of graduates within households and improved earning potential for these individuals would improve their social status. "The Barbadian experience has proven that education has immense power to transform the human condition and contribute to economic growth and development" (Professor Harris, Personal Communication 2015). In fact, it can be argued that education has been used as the key vehicle to ensure the increase in national and individual incomes and bring about economic growth (Babalola 2003; Bronchi, 2003). Dr Lynch reflected on this benefit and expressed the view that:

It [access to government-financed tertiary education] would have also looked to develop the social infrastructure because I could now see that when you have a larger number of persons from a household that is educated, and I believe that you know when I was growing up, in the village, you could have had just maybe one person with a degree and things like this. Now you are finding that a large per cent of persons within communities have degrees and some of the actual degrees could be in some areas that could help develop that social area (Dr Lynch, November 11, 2014).

According to Baum and Payea (2004), higher education pays and in addition to the monetary benefits to individuals and increased tax revenues to economies from highly qualified and skilled workers, the societal benefits include reduced reliance on social safety programmes and an increased number of persons taking greater responsibility for ensuring good personal health. Riddell (2005, p. 26) suggests however that "education may impact how individuals assess information on how to improve health, and it may increase the efficiency by which individuals use that information in lifestyle choices."

4.3.2 Personal Social Benefits: Opportunity to Access Tertiary Education

One of the most referenced perceived benefits of the model of financing tertiary education prior to the introduction of the fee-paying model in September 2014, therefore, was that government-financed tertiary education significantly contributed to the socio-economic development of individuals. Of the participants, females, who represented approximately 64%, indicated that owing to the funding model, there was an increased enrolment of Barbadian citizens who did not have the necessary where with all to pursue tertiary education. For the purpose of this study, the socio-economic status will be concerned with the income and finances of individuals especially as it relates to the pursuit of tertiary education.

Barbadian governments have long emphasized that education is a necessary condition for self-sufficiency and "individual dignity" (Carter 2011) and, therefore, the post-independence period has seen important policy initiatives at all levels of education – from early childhood through to technical/vocational to tertiary. In 1963, when the Barbados government agreed to the establishment of a University of the West Indies

Campus, that decision was prompted by a desire to radically increase the number of Barbadian students who could attend the UWI. The initial enrolment at the Cave Hill Campus in 1963 was five hundred (500), with the majority of students being Barbadian. Within a decade, enrolment had increased to one thousand (1000) students.

Prior to 1963, Barbadian students travelled to the Mona Campus of the University of the West Indies, in Jamaica, where the Government of Barbados funded the economic cost of their education. It was a very small number of students who attended the university in those days and in many ways, one could say that, that very small number was a privileged elite who were in a position to afford tertiary education upon completion of secondary schooling and that the model was designed around the creation of elitism in the educational system (Marcucci and Johnstone, 2007; Worrell, 1996, Carter 2011). Layne (1989) posits that from 1627 to 1966, tertiary education in Barbados meant being educated overseas at a university or college.

What this meant was that the very small number naturally created elitism within the system because very few Barbadians were returning home with a university education and those who returned home with a university education, especially in the area of medicine, which was the first faculty of the university, were guaranteed life-long access to status and income (Marginson, 2015).

Ms Seale, the senior public sector administrator pointed out that the provision of tertiary education for all was to ensure that not only "the privileged few would have this opportunity," or as Jane, one parent noted, for "not only the haves but the poor." Mr Cave specified that:

In other words, the son of the highest-paid person in Barbados and the son of the lowest paid person in Barbados, even the unemployed, the vulnerable, all had the same chance and opportunity to benefit from a university education (Mr Cave, Policy Maker, November 6, 2014).

This was therefore seen as the avenue that could positively change the social status of persons, especially those persons from the lower social and economic class. These classes were in accordance with Giddens (1993) who suggested that "classes depend on economic differences between groupings of individuals – inequalities in possession

and control of material resources." (p. 215). Riddell (2015) opined that the participants too believed that as a result of free tertiary education, individuals from disadvantaged backgrounds yields a substantial return in the form of enhanced earnings, in addition to contributing to equity issues. Mrs Smith, a participant of a student focus group stated that "it [provision of state-funded tertiary education] opened a gateway for persons in the lower echelons that would not normally have gotten a University education to do so" as the requisite financial resources were just not available to the masses to pursue this level of education.

The discussions regarding the provision of "equal opportunities for [tertiary education] for all sectors of the population, and as detailed by Jane (November 6 2014) "down to where you would have wider gaps between various classes" appeared to have been sincerely welcomed and based upon a profound awareness of the class and power struggles of the masses which strongly existed in Barbados up until late 20^{th} century.

Mr Kent acknowledged his gratitude for the opportunity and stated that:

My parents could not have sent me to university at the time I wanted to come because they had four children to look after and therefore, I was the last so I might not have gotten the opportunity. So that would apply to a lot of working-class families in Barbados and therefore I think Government saw the need when it introduced the policy of paying for students to come to university (Mr Kent, December 17, 2014).

He further pointed out that:

I thought it was extremely useful in those years when Barbados was going through its own development from say, when the university started until current times because there were a number of people who would have been in the society who could not afford to come to university and therefore if it was left to them, a lot of them would not have had the opportunity to be educated (Mr Kent, December 17, 2014).

According to Professor Harris:

It was recognized that in Barbados the Black community that is largely the descendants of the enslaved population, had remained disenfranchised and dispossessed from the economic base of the economy and that going into Independence, that structure had remained.

The thinking at independence was that education would be the model or the driving force that would allow for black empowerment. It [Barbados] chose instead to invest in the education of the masses of people so that economic empowerment, economic enfranchisement would follow from access to higher education. So, it was a major source of social engineering, it was a major policy tool for social engineering in order to create the basis of what was hoped to be, as Mr Barrow once described, a just society (Professor Harris, January 29, 2015).

The model was perceived to also have paved the way for the offspring of persons who would not benefit from even as much as basic education, to actually advance in society way beyond their parents' station. Keith, a student who was interviewed, also suggested that state-funded tertiary education "would have played a role in increasing the number of graduates in each household", a developmental goal articulated by the previous administration." It was, therefore, a sincere opinion that the growth in human capital was extraordinary because of the free tertiary.

The model was especially seen by Dr Lynch as beneficial to those students who excelled academically in secondary school. She referred to a perceived inherent motivational factor and posited that:

students who did well in school the idea that you were guaranteed a place in tertiary education would have been a motivator from say secondary school when you are aware - ok, this is an option for me - to know that if you excel and you do well your government is going to invest money in you to make you a productive citizen and at the same time offer you upward mobility whereby your family can't afford it, that aspect of the model is good (Dr Lynch November 11, 2014).

As a result, the brightest and best citizens remained in the country, giving rise to the creation of a black middle class of professional lawyers and doctors. They also held the view that the model had resulted in beneficiaries employed in higher-paying jobs, improved housing, improved education and improved health services. Moreover, persons were able to move from public transport to private means of transportation.

It was further viewed that owing to this model, the financial burden for tertiary education shifted from the individual to the state, so that regardless of class status, one could access university education. This also meant that without the burden of tuition fees, individual households were able to maintain their particular lifestyle in such a way as to cater to the other social needs. Marcia (Parent, Focus Group, November 6, 2014), stated that a benefit of the model too was that "You started working life without having student loans to repay."

It was unanimously perceived that this model of financing university education was responsible for creating a society which had been transformed as a result of the upward social mobility of the population. According to Dr Manning:

When you invest heavily in education, you end up with people who can get gainful employment and when they get gainful employment then you have less crime and when you have less crime, it translates into social conditioning and social harmony. I don't know if it was the 2012 or 2013 human development index, Barbados was at number 37; that is a significant achievement. You are ahead of some Eastern European countries, and I know fundamentally it is because of an investment in higher education. It is a social sector investment that has helped Barbados to do that (Dr Manning, Informed Specialist-Tertiary, November 12, 2014).

The very fact that you can go to Hilton and go through and get into the beach, and mingle with the tourist without the tourist getting worried about getting robbed in the back of your mind; that in itself is a significant contribution (Dr Manning, Informed Specialist-Tertiary, November 12, 2014).

Mr Richards too added his voice to the impact of social development and suggested that the strength [of the model] is [that] more people can readily access university

education and generally the more people in a country with university education or tertiary level education of whatever type or whatever subject or whatever course, the society would be a better place - people are more literate and so on and so forth (Mr Richards, Policy Maker, November 6, 2014). This point was also made by Dr Manning and while confirming the impact of education in Barbados and the literacy level, referred to the "literature [which] shows a direct relationship between literacy levels and the pool of skilled human resources and economic development.

Consequentially, the model was viewed as having played a significant role to overall national development as the investment in the education of the masses, allowed Barbados to move away from an agrarian economy to one with a wider skill base. The model was seen as part of the traditional system of democratic upliftment that had been a feature of public politics and social philosophy for almost a century. In addition to incomes gained from employment commensurate with tertiary education qualifications, Riddell (2015) classifies benefits of education such as improvement in health and reduction in crime as non-market benefits.

One of the barriers to access as defined in earlier research related to the high cost of tuition fees and therefore, is unaffordable to poor, working-class families. As was the social stratification of Barbados in the early 1960s, this resulted in most citizens being unable to afford tertiary level education and ultimately, qualification. The cost of education relates directly to remuneration to faculty members, administrative costs, and capital costs associated with infrastructure. Per pupil expenditure at the UWI as at 2017 stood at BDS 21,480.00 when compared with approximately BDS 6,088.00 at the secondary level and BDS 6,719.00, (METVT-Funds Control Report). Fenoyl (2017) discusses the labour-intensive nature of higher education and reflects on the concomitant increases in the cost of professors driven by the global demand for highly skilled labour in the new knowledge economy.

It was in this context that publicly funded tertiary education remained in place for as long as the public finances could accommodate it. Barr (2011) therefore suggested that given that higher education generates significant private benefits, "graduates, not students, should bear some of the costs associated with higher education" (p. 4). He

further advanced the notion of determining the efficiency level of spending, taxpayer subsidy and consequently, the level of personal investment by graduates.

4.3.3. Personal Social Benefits: Social Mobility of Women

Throughout the interviews, the appreciation of increased access to tertiary education through state funding was a more prevalent focus for the female participants as evidenced by the Packed Cloud, Figure 4. The women acknowledged the opportunity for social advancement through education at a higher level. The chance to attain a degree which would then improve marketability in various labour markets as emphasized by the women appears to have influenced the enrolment of women at the UWI in Barbados. Several reports highlight the continued increases in female enrolment when compared to that of males. Table 8 shows the trend in enrolment by Gender at the UWI, Cave Hill.

Table 8: Trends in enrolment by Gender at the UWI, Cave Hill

Five Year Enrolment Trends–2010/11 to 2014/15, Cave Hill Campus								
	2010/1	2011/12	2012/13	2013/14	2014/15	2015/16	2016/1	2017/18
	1	2011/12	2012/10	2010/11	2011/10		7	
Male	32.00%	31.70%	31.80%	32.10%	33.10%	34.72%	35.06%	34.76%
Femal	68.00%	68.30%	68.20%	67.90%	66.90%	65.27%	64.93%	65.23%
e	00.0070	33.3070	33.2070	37.5070	00.7070			

David (2015) argues however that while participation rates in higher education programmes have increased dramatically, this does not translate to participation in academic labour markets. Morley (2012) also documents this issue as she notes the discussion as to "whether access to higher education contributes to gender equity in wider civil society" (p. 47). She cites the works of Walkerdine (2003) who highlights the "uncertainties about whether widening access and participation are redistributive measures or, indeed, whether access is simply a part of the neo-liberal project of self-improvement and social mobility in which subjectivities, aspirations and desires are constantly aligned with changes in the labour market" (p. 238). It should be noted though that in the Barbadian society, access to higher education is open, and

therefore, women are not excluded from participation in either tertiary education or becoming employed in knowledge-intensive jobs.

4.3.4 National Development: Supply of Skilled Workers

One of the key findings of the model was that the investment in tertiary education for citizens contributed to National Development through the creation of a mass of highly specialized persons in the fields which were heavily demanded at the time. From the days of Mona in Jamaica to the days of Cave Hill in Barbados, the principal form of funding was for the Government to pay the University the economic cost of the degree. For many people, this was quite satisfactory in Barbados because the country had taken a decision to expand the professional community through university education and thereby seek to increase the social returns to human capital formation.

The pledge to finance tertiary education was based "on the assumption that formal education is necessary to improve the productive capacity of a population" (Almendarez, 2016, p. 20). The commitment to the payment of university costs was social, geared towards a better-educated people, and at the macroeconomic level, leading to lower unemployment, and consequently, an increase of labour-force participation rates (Babalola, 2003; OECD, 2003). Barr (2011) however highlights the issue of establishing causality as it relates to the assumption that education leads to increased productivity and advances the view that productivity could be as a result of other factors such as the natural ability.

Mr Kent (December 17, 2014) believed that this model,

Basically, allowed the government, to some extent to identify those areas which, they also wanted to have development taking place in. There were some programmes like the sciences, and humanities for example, which are not necessarily areas that people naturally gravitate to, in this environment, which needed to still have funding so that persons could be encouraged to go into those areas.

Dr Manning, an informed specialist with a development agency was the most vocal participant on the model's benefit to Barbados' national development. He acknowledged this as a major benefit of the model and suggested that:

by heavily investing in higher education [Barbados] created a critical mass of highly specialized persons in the fields of medicine, engineering, law, actuarial science, architecture, education, theology and all that and the development of a country is positively correlated with the levels of education. So, a natural advantage of that, [is] that, [by] having the requisite infrastructure in place, which is the human resources that make up everything, in this case, human capital, Barbados positioned itself on a growth path, on a development path, not a growth path (Dr Manning, November 12, 2014).

The value of higher education was genuinely acknowledged for its contribution to increasing human capacity with the necessary skill sets to facilitate interaction with external markets. With particular emphasis on the international commercial sectors, Dr Lynch suggested that Barbadians, through access to state-funded tertiary education were able to improve interaction "in terms of presentation of self and the ability to interpret knowledge, and contracts with people outside of Barbados" (Dr Lynch, November 11, 2014).

Dr Manning seemingly supported this notion by suggesting that those qualified Barbadians would have become the significant voices for this region, in terms of defending the rights to access, preferential loan terms, attracting FDI - foreign direct investment, and then they lobby, linking up with the chamber of commerce and industry, which in turn would have resulted in more collection of taxes from offshore businesses and international businesses and higher lifetime earnings on government tax receipts from graduates (Dr Manning, November 12, 2014). This position is supported by (Davies, 2002).

As pointed out by Professor Harris: many co-operations wanted to be here, the international diplomatic community wanted to be here, those who were investing in services - tourism and so on - wanted to be here because the university and education, in general, had made a tremendous contribution to creating a sophisticated community, not only a labour force but a community of persons who were modern and sophisticated. So, the model enabled Barbados to forge ahead of the other countries that had not made the investment (Professor Harris, January 29, 2015).

Mr Cave, an experienced policymaker, further suggested that:

it is that model that allowed Barbados to be viewed quite high in the number of persons who have tertiary or university training or university education from those of the Eastern Caribbean where only about 10%-12% of the eligible cohorts have a university or tertiary education, while in Barbados the figure is between 38% and 40% and that is because Barbados has been consistent, was, in fact, consistent from 1963 in carrying that model right down to 31 August 2014 (Mr Cave, November 6, 2014).

The provision of tertiary education in Barbados could be characterized as non-exclusive, non-rivalrous, and state-financed (Tilak, 2008). As previously mentioned, successive governments, up until September 2014, have supported the policy of public financing of tertiary education at the UWI for nationals, and the benefits of this policy unlike private goods, extended to both the Barbadian society and individual citizens. To emphasize the importance of education as a public good in the Barbadian context, Mr Haynes a public sector administrator, therefore, pointed out that, "Barbados doesn't have any natural resources. Our main resource is our people and so we have to invest in our people." At the national level, this substantial development in tertiary education would have resulted in an educated and skilled labour force which allowed for the "structuring and restructuring the economy", from agriculturally based to a greater focus on manufacturing and service industries. Internationally, the tertiary level focus on the needs of the labour market such as areas like innovation, information technologies and tourism studies would have attracted foreign investors to Barbados. These findings were supported by (Neamtu 2014; OECD 2002).

In addition to the supply of labour to domestic markets, the supply of skilled labour to external labour markets was also considered as one of the benefits of tertiary education. In fact, it was pointed out that there are a number of persons who are in prominent leadership positions in the countries in the Caribbean, and who through remittances could contribute to National Development. Evidence of the success of the Barbadian education system can be seen in the demand for educated Barbadians to work abroad in every sphere of the world of work (Barbados Statistical Service, 2012).

The view that the educated workforce contributed to the economic growth through the development of commercial, financial, accounting and international business sectors and consequently, would have resulted in a greater flow of foreign exchange was also advanced. According to Dr Manning, this would have:

Propelled the economy because when the government has huge, has sufficient foreign currency in its coffer then it does not necessarily have to invest continuous funds for current spending to pay for imports because Barbados is a largely import economy (Dr Manning, November 12, 2014).

It was also suggested that the consumer activities and payment of taxes by those qualified persons within the labour market would have contributed to Barbados' economic growth. Dr Manning opined that:

The second thing in terms of this pool of human resources created. What is the difference? Cause they pay tax! That is a significant contribution to the government these are people who are able to spend on luxury goods which are highly taxed so not only are their income taxed but the luxurious lifestyle adds to those benefits to the economy. I mean look at it, tax on vehicles in Barbados is one of the highest in the world but people will not stop from buying! (Dr Manning, November 12, 2014).

He further believed that:

the reduced burden to households in investing in funding education then it leads to consumption expenditure and consumption is good for the economy in the sense that people will go for holidays, would spend naturally, and they buy luxurious goods along with their basic needs and the tax returns again to the government is high. So that then is a natural advantage (Dr Manning, November 12, 2014).

Hence, this model was viewed as a catalyst for increased employment through increased innovation and was considered, according to Mr Cave, a key contributor to the increase in Barbados' gross domestic product by leaps and bounds over the last 20/25 years." This view, therefore, supports one of the early theories of the causal relationship between investment in education and economic growth. According to Hanushek and Wobman (2010, p. 245), "education can increase the innovative

capacity of the economy, and the new knowledge on new technologies, products and processes promote growth." Riddell (2005, p. 37) supports this view by stating that "tertiary education has a special role to play in preparing workers for technological adoption and innovation".

4.3.5. Political Development: Contribution to the formation of National Leaders

Most opinions offered on the impact of state-funded tertiary education on the political development of Barbados could be construed as positive, with the central focus being the availability of locally trained politicians, who were developed from national influence instead of from a colonial influence, and having a higher sense of nation-building and a sense of regionalism and nationalism. In the context of the Caribbean, the political environment was characterized by mainly a two-party system, shaped by the British form of government and governance. As seen from Figure 6, the administrators of the tertiary institution focused on the enhance knowledge and understanding of the theories on governance and governance structures, and the positive impact on the number of persons who could then contribute in the political arena. Professor Harris advanced the view that through state-funded tertiary education:

Barbados was, therefore, able to enter into an anti-colonial and nationalist phase by virtue of having now, for the first time, a small cadre of political leaders and managers sufficient to populate two (2) or three (3) political parties and sufficient to run a government so that by the 1950's and 60's we had a sufficient cadre of black middle-class professional people or people who had been formally educated to administer governance, to run political parties and then finally, to take possession of the country (Professor Harris, January 29, 2015).

Individual participants, policymakers and some within the focus groups too highlighted the increase of "home-grown politicians," "contemporary leaders," or political leaders in Barbados within the last 20 years who were educated at the University of the West Indies. Mr Richards, another policymaker further pointed out that "The current political leadership and across political parties are all beneficiaries, they are products of the state-funded university education. So much in the same way it

has helped society generally, it [state-funded tertiary education] has broadened the political class, [and had] allowed more and more people to access political activities.

Previous researchers on the relationship between higher education and politics appear to suggest that the academic thinking and skills acquired during higher education contribute to enhanced civic engagement. Egerton (2002) notes that "experience of higher education did seem to have a small effect on the probability of involvement in civic organisations and that 'mature graduates' increased involvement in these civic organisations substantially" (p. 617). Riddell (2015) also classified the increased civic participation and in particular being involved in the voting process as a non-market benefit of tertiary education. Acemoglu and Angrist (2001), Milligan, Moretti and Oreopoulos (2004) all support the view that having access to higher education raises the probability of voting.

It is important to note here that during the analysis of the participants' responses; it was observed that the demographics of the participants on the issue of were aged 40^+ and mainly male participants. While historically, males tended to dominate the political environment, within recent years, more females have been participating in elective politics.

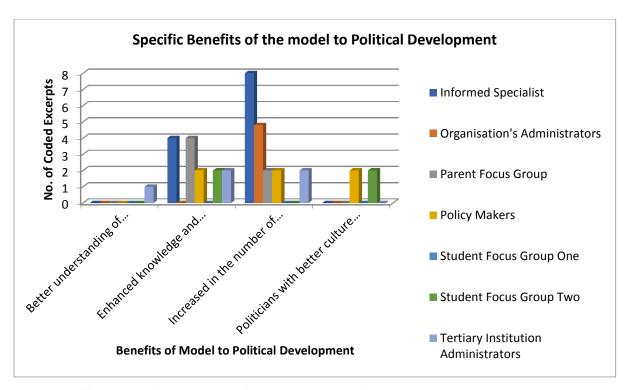


Figure 6: Strength of the Model: Contributes to Political Development

From the study, it was further felt that the model created conscientious political leadership, who better understood the dynamics of their own culture. As a result, the increased national and regional influence was brought to bear on the various strategies and programmes that were to be developed. Mr Cave (November 6, 2014) advanced the view that "this high sense of regionalism and nationalism emerged from all those persons schooled within the context or the crucible of the West Indies."

There was a further suggestion by Mr Cave that this model had led to the creation of individuals who were now better studied in both policies, policy and programme development. Dr Fields reflected on his own tertiary education experience and indicated that:

I have found that as a graduate of the University of the West Indies, I would have had a much better understanding of politics generally, in terms of having studied the first year in politics, it gave me a greater understanding of the different types of political systems that are in place the world (Dr Fields, November 11, 2014).

Regarding politicians, Mr Haynes emphasized that access to state-funded tertiary education produced "home-grown politicians who are visionary with a vast amount of capacity in terms of being able to think strategically." It was suggested that these politicians were then able to interact in various fora across the world from a knowledge base and experiential background. Mr Cave advised that:

We were able to send our negotiators to other places to negotiate various agreements of all types. Previously you would have to draw on other countries but now with the pool of available knowledge, skills and competencies, you can draw from your own (Mr Cave, November 6, 2014).

Dr Manning assented and suggested that:

It takes an educated political leadership to be able to read through the structural programmes coming from those foreign [institutions] and say ok, this is what you want us to do, but there will be ramifications in terms of a, b and c. So even in terms of the making, the political leadership able to negotiate, to draft the right policies and programmes for the people to be able to negotiate with the international lending community the Bretton-Woods institutions and even the World Bank, the education has helped. So, you need a conscientious political leadership and that [is] brought about by education. And I think that is where Barbados stands above other countries in the Caribbean (Dr Manning, November 12, 2014).

He, however, cautioned that an educated political leadership must "of course goes with the formation of the right economic policies." In addition to the creation of politicians, Dr Manning also pointed out that:

"Investment in tertiary education in Barbados resulted in a higher level of civic awareness among the educated."

He further argued that:

"Educated persons are more likely to embrace civic responsibility because of awareness of their rights and their contribution through participation in political processes to national stability and development."

4.3.6. Standards in Tertiary Education: Ensuring Quality Assurance

Another perceived strength of the model used to finance university education before 2014 was that it ensured quality assurance of the programmes being offered at the large public institutions which minimized the chance of the proliferation of low cost private institutions. This solitary suggestion was advanced by Dr Manning who believed that:

in the sense that because there is a large public provision you don't have proliferation of low-cost private institutions that would prey on the excess demand for higher education that would be there and you, therefore, ensure that the funding is commensurate with the prerequisite of quality that needs to be put in place and that will ensure that the graduates you have been able to compete with any other internationally (Dr Manning, November 12, 2014).

The public tertiary education landscape in Barbados encompasses the University of the West Indies (UWI Cave Hill and Open Campus), Barbados Community College (BCC), Erdiston Teachers' Training College (ETTC) and the Samuel Jackman Prescod Polytechnic (SJPP) now the Samuel Jackman Prescod Institute of Technology (SJPI) (Mindbloom, (2017).

The establishment of the Barbados Accreditation Council (BAC) in 2004 could give some credence to this view and therefore be seen as central to a quality assurance framework for the provision of tertiary education. One key function of the BAC is to "enhance the quality of tertiary education provision in Barbados through the registration of institutions offering post-secondary or tertiary education and programmes of study, and the accreditation and re-accreditation of programmes and institutions in Barbados. However, Salmi and Hauptman (2006) advocate that "even with a solid accreditation system in place and with linkages to funding, not all institution allocation mechanisms are equally effective at ensuring or improving quality" (p. 55).

According to Beerkens and Udam, (2017) it was believed that "quality assurance should offer some guarantee that education offered by an institution meets expected standards" (p. 30). They further note that while university leaders and teachers value the quality assurance process and the importance of feedback to internal development,

the quality assurance process "could be an input for government steering, more broadly" (p. 30).

It is noted that the UWI dominated the tertiary education sector in Barbados, with fewer nationals being enrolled in the other tertiary public and private institutions. Where other institutions exist, programme offerings target specific areas or specific professions. Within recent years though, questions regarding labour force readiness have been raised. Carter (2016) reporting in the Nation Newspaper, stated that Minister of Labour, Byer-Suckoo expressing concerns that new entrance into the workforce are lacking the necessary skills and competencies. Moore, (2006, p. 36) recommends that "the UWI may need to enhance its quality assurance programme by investing more funds in student resources (that is, library resources, Information Technology resources to name a few) and support for staff." This he points out would ensure consistency with the quality of graduates leaving the UWI.

4.4 Weaknesses of State Funded Tertiary Education

Notwithstanding the overall national gains and social benefits to individuals, several perceived weaknesses of the model were advanced. The participants opined that people ought to have some financial input and some investment in their education. Additionally, a significant number of the participants stated that the issue of the sustainability of this model in the present economic climate was a cause for concern. They expressed the view that the model was only sustainable if the revenue growth could cover the current and future costs of tertiary education, and pointed out that where there was a decline in revenues, there would be a reduction in the amount of money available for the provision of university education. There was a further concern that the reduction in government revenues could also threaten financing for other social sectors like health and welfare.

4.4.1 Economic Limitations

When the Cave Hill Campus started its journey towards internationalization and expansion of new and traditional programmes by 2005-2006, enrolment had reached close to ten thousand (10,000) students. At that time, the government paid the

economic cost for nationals, which was calculated at 100% of the cost of the degree. Policy makers, public sector administrators, participants from the tertiary institution as well as those within parents and students focused groups, therefore, expressed their thoughts on the issue of the sustainability of this model and the heavy financial burden placed on the state to fully finance tertiary education. Mr Cave believed that: The model is only sustainable if the revenues of the state continue to operate at its maximum output, but where there is a decline in revenues you would find that there would be a decline in the amount of money available for the provision of university education (Mr Cave, November 6, 2014).

From this policy maker's perspective:

It [state-funded tertiary education] placed an importantly high burden on the government of Barbados, on taxpayers as a whole, to always try to reach an ever-expanding university budget. It is known that university education is costly and in the last sixty-seven (67) years university education jumped or increased by some 60/70% and I am talking between 2006/07 and 2013/2014 when it moved from around Bds. 91m to Bds.162m for the programmes that were funded by the government (Mr Cave, November 6, 2014).

This weakness was quite evident given the worldwide recessionary period of 2007, of which, the effects to Barbados' economy are still being felt. Tewarie (2010) states that "in the area of financing tertiary system small states face particular challenges including greater vulnerability to fluctuations in the economies that depend on a single commodity" (p. 235). It must be noted that Barbados' economy is largely dependent on tourism and at present, the economy is under pressure because of a decline in the performance of the tourism sector and, therefore, the funding available to support tertiary education must be reduced. Dr Manning, in reference to the funding of tertiary education and the structure of Barbados' economy, specifically pointed out that:

the economic downturn that was experienced, which affected tourism as the mainstay of the Barbadian economy naturally would call for some realignment in terms of policy options that the country has and I think that is where the government of the country is right now (Dr Manning, November 12, 2014).

While Professor Harris agreed that the economic decline was a likely contributor to the shift in funding policy, he diverged a bit to express the view that change to funding was also driven by shifting political interests based on perceived societal change. He suggested that:

the political class was no longer committed to economic and social advancement and empowerment through education, that the society had already achieved an adequate degree of social mobility, that the independence of the political class was weakened, i.e. the political class was no longer master of its own destiny, but was now buckled under the economic thinking of the corporate class, the weakness was that once that process had happened, the model would collapse (Professor Harris, January 29, 2015).

Like most Caribbean territories, Barbados struggled to meet its financial obligations to the UWI and therefore required a review of the policy for the provision of funding for students attending the UWI. Karen (Student, September 19, 2014) indicated that "the government owes the University a lot of money and even though they were paying a part of it, they still were in arrears a whole lot." Given the increased intake of Barbadian students at the UWI, Mr Richards stressed that the model had now become unaffordable. Participants in the Students' and Parents' Focus Groups who expressed the positive view regarding increased access to tertiary education by especially those from the middle to lower classes, also supported the view that the model could not be sustained. Mrs Smith (Student, September 19, 2014) succinctly stated that "it was inevitable that the model would have had to be adjusted at some point." Marcia, in recognition of the financial limitation of the model, stated that:

I always felt within myself things in Barbados is going to change you are going to have to pay for things. I got money from his father estate and I put it down saying that is for him to study with (Marcia, Parent, September 19, 2014).

The responses also highlighted the disparity in funding students at various levels. Tewarie (2010) expressed the view that "government funding for tertiary education is widely threatened not only by economic uncertainties but where to place the emphasis within the education system" (p. 234). Mr Richards compared the cost of tertiary education versus basic education and suggested that "one other glaring weakness of

this model is that the university education tends to be more expensive than other forms of tertiary education, like community colleges and tech-voc," (Mr Richards, November 4, 2014)." Dr Fields too considered the enrolment of university education and the attendant expenditure when compared to other sectors within the education system. He made the point that:

In terms of the whole government bill for education, it is a significant amount and having recognized that the university accounts for about six to eight thousand Barbadian students. We needed to offer some balance because we have six to eight thousand students at university compared to thousands of students in primary and secondary and you know, when we look at the total budget of a university, you may find that a university being high-cost as an institution (Dr Fields, Tertiary Institution Administrator, November 11, 2014).

With reference to the cost comparison of primary, secondary and tertiary levels of education, Dr Manning believed that:

If you look at the ratio of the university to secondary to primary to early childhood funding, you will typically find that education at university maybe equivalent to educating 26 persons at primary and about 11 at secondary and nearly 50 or 100 in early childhood. So, the drawback is that we are spending nearly, more than 10 times more on one person at the university (Dr Manning, personal communication, November 12, 2014).

Yet primary education and secondary education, particularly secondary education happens to be terminal for a significant majority of the students. Psacharopoulos (1994) emphasized that the social return on primary education was considerably higher in most countries than the rate of return to higher education. So, the drawback is that we are expending, more than ten (10) times more on one person at the university which is largely a private group as opposed to secondary which is terminal for the majority.

Tewarie (2010) states that the "demand for tertiary education is growing and governments cannot by themselves afford to pay for the expansion" (p. 233). This increase in public spending is" as a result of increasing public and private demand for

higher education, an increase in student enrolment and declining government revenues" (Marcucci, Johnstone and Ngolovoi, (2008, p. 1).

Psacharopoulos (1986) warned that such a system of the level of government funding was unsustainable in the face of rising demand and limited government revenue. Unlike the position stated by Darrell and Dundar (2000) who opined that "whereas the number of students in the developing countries has more than tripled over the past two decades, the amount of the public resources allocated to higher education has only increased by 15%" (p. 2). Nevertheless, this is not the experience of Barbados as the amount allocated to tertiary education especially University education. According to Government Estimates of Revenue and Expenditure, (2013-14) "for the period 1999 to 2007 combined, the total contribution required from the government of Barbados to the Cave Hill Campus was Bds. \$543.2 million, compared to the Bds. \$636.3 million-dollar contribution required for the 2008 to 2012 period. The reality is that the amount required in the last five years was Bds. \$93 million greater than the previous nine years combined" (p. 354).

In the case of Barbados, increased budgetary requirements for tertiary education contributed to the national debt and deficit, creating further pressure on the Government's finances. Specifically, the increase in tertiary education expenditure placed an inordinately high burden on the government of Barbados and on taxpayers as a whole, to adequately provide sufficient budgetary resources to reach an ever-expanding university budget.

From the foregoing, the focus should be finding the equilibrium between the supply of human resources required for the country and a more equitable distribution of public expenditure. The fate of tertiary education, therefore, depends on what the government sees as the role of tertiary education in the development of the country, Tewarie (2011); Louisy and Crossely (2011).

4.4.2 Personal Financing of Tertiary Education: Partial or Full Contribution

As it relates to the high cost of tertiary level education, there was a view that individuals ought to have some financial input and some investment in their education, reducing this significant burden on the state. Mr Richards suggested that:

People at that stage ought to have some financial input - some investment in their education. Even if the State could afford to pay all some people argue that it may be better for the State to let students pay part so that they have an investment, especially the students in areas like medicine and law and some other areas that are going to be more lucrative when the students begin to work (Mr Richards, November 4, 2014).

Dr Fields supported this view and echoed similar sentiments. He opined that:

Students should be able to make some sort of contribution to their education. I mean I would have benefited from the 100% funding in terms, but when I initially went to the university as a part-time student, I used to pay a tuition fee, back in the mid-eighties - if you were part-time, it was you paid a small portion which would have been called a tuition fee back then (Dr. Fields, November 11, 2014).

These views are supported by Marcucci and Johnstone (2007) who state that the costsharing strategy is used to spread the "burden of higher education instructional cost between the student, the parents and the government. They further suggest that governments are increasingly turning to cost-sharing in order to meet this demand" (p. 16). The participants stated that the Government was transitioning from a fully free public education system to one of direct cost recovery in having the beneficiaries of higher education contribute to their economic cost.

4.4.3 State Funded Education – The Taxpayers' Burden

Participants stated that the increase in tertiary education expenditure placed an inordinately high burden on the government of Barbados and on tax payers as a whole, to adequately provide sufficient budgetary resources to reach an ever expanding university budget. Mr Haynes, however, believed that the then model was an unnecessary tax burden for those that don't wish to participate in programmes such as that [tertiary education] and for those who did not have children that are seeking [to participate] in tertiary education. This respondent seemed to be suggesting that only those who were recipients of state-funded tertiary education, either directly or indirectly should contribute to this activity.

It was also pointed out that:

"The university itself had to go into a lot more efficiency models [of financing] in order to contain costs, but even then, they still had to seek other external revenues" (Mr Haynes, Organization's Administrator, November 6, 2014).

There was, therefore, an overwhelming recognition of the need for change. For one, Dr Manning highlighted the "need for a shift, a re-configuration: shared responsibility between the state and the beneficiaries of education" (Dr Manning, November 12, 2014).

4.5 Factors Contributing to Economic Limitations

Some participants also highlighted several systemic weaknesses which could have contributed to the high cost to the government for tertiary education. These systemic weaknesses related to lack of labour market research to guide the funding of degree programmes and the lack of monitoring policies to ensure that funding was provided for students as per the stipulated programming period. While female participants focused on students' programming actions, lack of means testing processes and lack of employment options which could permit both the individual and government to benefit from the investment in tertiary education, male participants zeroed in on labour force demand and supply mismatch and expansion of tertiary education sector.

4.5.1 Lack of Labour Market Research

According to Downes (2013), one of the factors which "fuel the demand for tertiary level education in the region is the higher levels of education needed for social mobility and production processes, especially those middle and higher-level skills" (slide 6). The qualifications for these professions usually require a minimum of a Bachelor's Degree in a particular area of specialization. Karen highlighted changes to public sector recruitment as a motivator for an individual's pursuit of tertiary level education and stated that:

Nowadays you have to have certification and I think this helped to cause people to go and study because working in a position for a number of years and then because you don't have the qualification somebody comes that now studied and gets the position and then you still have to train them. I think that has pushed people too to study so that that wouldn't happen (Karen, September 19, 2014).

In general, Karen further pointed out that:

nearly every job asks for qualifications so that is why people push the students to go school and learn, come out with something [qualifications] so that when you get to the world of work you would be able to find a job somewhere. So, I believe that is what helps turn people to the academic part of it because nearly every job asks for qualifications (Karen, September 19, 2014).

From a demand perspective changes in labour market requirements, this would have resulted in a substantial increase in Barbadian student enrolment at the UWI and this would have primarily contributed to the increased budgetary requirements to maintain state-funded tertiary education.

4.5.2 Lack of Monitoring

One of the limitations of the model cited by some participants was the inefficiency caused as a result of the students changing programmes. It was reported that in some instances students' absences from class resulted in completion times of six-years when compared with the expected two-year completion time at registration. This too was viewed as having contributed to increases in the cost government was expected to pay the University for these students. Dr Lynch highlighted this concern by stating that:

even for those who went, there is a sense that they could not be as diligent so to say in terms of graduating so at some point - and this is a weakness that I don't think was intrinsic in the system but it was a weakness because it wasn't upheld. There were a certain number of years that you were given to graduate but Government and the university did not maintain that aspect and so a student who was supposed to come in for a 3-year degree would be coming in and spending 8 years for example. That was a drain on the Government and apparently, there was a rule that was already on the books speaking to the

amount of financing per year but it was never maintained (Dr Lynch, November 11, 2014).

Dr Fields also agreed to the notion of wasted public financial resources. He said:

Some of the students did not value than 100% contribution that the government would have been making. There were some students who would have registered for courses, knowing quite well that they have no intention of completing the course in that particular semester and just would refuse to turn up for the exams. Whereas, the government of Barbados would have paid for that student's attendance at the university for that period. So, some of them, what we would see as the fail/absences appearing on students' transcripts, in my regard, would be a blatant disregard to some persons funding your education (Dr Fields, Tertiary Institution Administrator, November 11, 2014).

From the foregoing, it appeared that the whole concept of "state-funded tertiary education" was not considered in its entirety by some students of the institution. In fact, Ms Seale admitted:

When I was at university for example certainly in my first degree, when I was there I never thought well the government of Barbados is spending x amount of money on me to get this degree and so, therefore, I have an obligation to try to do this very well, work very hard, get the degree and go out there and make a contribution, that, as a 20-year-old, 10-20 years old, that didn't cross my mind, and I'm not sure it crosses the minds of most 19-year-olds and 20-year-olds (Ms Seale, Organization's Administrator, January 2015).

Mrs Smith, a student, also stated that she:

Only appreciated telling the truth, when I went to do my Masters and had to take a loan. I almost had to get the smelling salts when I heard how much I had to be bringing to pay. I guess like everything else when things come and are perceived to be free you don't appreciate it as much as if you had some input into getting it. You didn't fully appreciate what was happening in terms of the government and the amount of money that was being paid (Mrs. Smith, September 19, 2014).

Another reference to this issue was made by Mr Kent who held the view that:

Some of the students who may not have taken it as seriously as they needed to in terms of their education were the ones who sometimes had the resources, where the parents had the funds and therefore, they did not see the need to push themselves. I find poor people tend to push to get through the system as quickly as possible because they want to get on with their lives but when you have it you don't seem to have the same energy and drive to push through (Mr Kent, December 17, 2014).

Mrs Smith offered one reason for the delayed completion. She suggested that:

"They [some of those who default] are not really interested in what they have chosen to do, they just do it because it is a degree, and then you are switching, waste of finances, a waste of resources, a waste of money" (Mrs. Smith, September 19, 2014).

From the policy-makers' perspective, a programme to programme shifts was made without necessarily looking at the cost implications and without placing an immediate value on the cost of education and taking it for granted. It was viewed that the incidents of this occurred and increased because there was limited enforcement of the rules of enrolment by Government or the university. It was suggested that a determination of skills and qualifications needed to 'take this country forward' was needed so as to identify education and training areas that should be funded so as to minimize resource wastage as a result of these occurrences. Mrs Smith asked and answered by specifically stating:

"What is going to promote our tourism product in a way that it is different from Fiji or Trinidad? Or wherever! And then once we find that out then we need to figure out how we can expand the skills of our young people to meet the national needs" (Mrs. Smith, September 19, 2014).

4.5.3 Means Testing

The lack of means tests to determine who should benefit from state-funded education was raised by the participants as a particular weakness of the model by mainly the public sector administrators and representatives of the tertiary education institution. Most definitions of means testing converge to the explanation provided by the Collins

Dictionary, which is "an assessment which determines, based on income, the suitability of a person for financial or social aid from the government." For, example, a theme which emerged was that the "freeness" of tertiary education motivated more persons to become enrolled in programmes at the UWI, including those who could afford to pay for tertiary education. Ms Seale believed that:

It [the model] did not lend itself to people who could afford to educate their children to do so when they had the opportunity or the option of having free education. So where you had no need - people who had no need really - to benefit from that opportunity did so because well, there was no reason not to do so, and as a result of that additional pressure was brought to bear on an economy, which, even though it had been strengthened was not really solid enough to withstand the kind of persistent expansion of the cost of that education without feeling an enormous burden and pressure at a certain point (Ms. Seale, Organization's Administrator, January 2015).

Dr Lynch concurred and believed that the sustainability factor was affected significantly because:

There [were] people in society who could afford to go to college without the government's help." This she said needed to have changed as "it could be taken advantage of, in terms of those who are economically able to pay for a university that didn't have to, so it then placed them at even more advantage in society (Dr Lynch, Tertiary Institution Administrator, November 11, 2014).

These views were strongly supported by Mr Kent who pointedly indicated that:

A weakness would have been for those people who could have actually paid during the period. There should have been some mechanism which allowed those people who could afford to pay to actually contribute towards their education as well. We've had people who've sent their children overseas, to overseas universities whatever. Because there are some people who would have emerged within the economic sphere of the society who could have afforded to make that contribution even if it is not a full contribution. It could have been started off as a 10% or a 5% of the tuition fee so that was a weakness in there in that it gave everybody a carte blanch provision of the

payment basically and people sometimes took advantage of it (Mr Kent, Tertiary Institution Administrator, December 17, 2014).

There is also the view that in addition to public sector salaries, entitlement programmes such as the state-funded tertiary education in Barbados are also a significant source of public sector debt. Universal entitlement programmes increase government expenditure, with every member of society no matter the financial status being able to access these benefits. An appropriate and well-managed means-testing programme would ensure a targeted approach to the provision of state-financing for tertiary education for those who need it. In tandem with this objective, the means testing approach will decrease expenditure and budgetary requirements for state-funded tertiary education. Marcucci and Johnstone (2010) posit that "means testing is a form of subsidy targeting attempts to distribute higher educational subsidies to needy students based on their family income and therefore eliminating the students who can afford to pay" (p. 1).

4.5.4 Labour Market Limitation: Excess Labour Supply

Participants held the view that the provision of free university education model perpetuated a situation which led to a mismatch between labour force demand and supply. According to the participants there appeared to have been, over time, an excess supply of particular qualified and skilled nationals within the labour market. This appeared to have resulted from persons being able to choose their programmes of study with no reference to a state-imposed priority of programmes. It was also felt that Barbados, after having amassed sufficient human capital in traditional sectors required to take the country forward, the need for heavy investment in university education was perceived to be of no use except for research and innovation. According to Dr Manning:

There is normally a cut-off point when a nation has created a sufficient human capital that is required so that heavy investment in university education does not make any more sense except for research and knowledge innovation. So, I believe that Barbados probably reached that cut-off point nearly 10 years ago this is my interpretation. So, we could then say that for nearly one decade we had what you can call sup-optimal public investment in higher education (Dr Manning, November 12, 2014).

Mr Richards (November 4, 2014) appeared to have agreed by confirming that universal entitlement to tertiary education in Barbados engenders another weakness "that you may be producing a lot of academics that the economy can't absorb." This issue was also highlighted by Mrs Smith who stated that "A lot of our Bajan [Barbadian] students went up UWI and did management; there are only so many managers that you can have so they end up in places other than where they expect." She believed that the "graduate per household" initiative further compounded this issue. In supporting Karen's view that access to tertiary education pre-September 2014 meant that more people were getting into UWI and that programmes of study were chosen without carefully considering employment opportunities, she queried the utility of the qualification after graduation. She pointed out that having:

Only a first degree doesn't really end it, you got to go on to do further studying in psychology in order to get a job as a Psychologist. It depends on the area and again, if you do law or sociology and law which a lot of people do, unless you plan to go on to Hugh Wooding and get the Law degree [Legal Certificate], you just have a degree in your (Karen, September 19, 2014).

There was also a consequential view that the investment would not match the returns given that some persons who pursued traditional studies could not find employment relevant to their area of study due to labour market saturation. These graduates would have either accepted employment for remuneration not commensurate with their level of studies or in some cases would have migrated in search of further studies or employment. For instance, Liam stated that:

"You have a need for lawyers, you pay for 20 people to go and do law because there was a shortage of lawyers in Barbados - then these people go and do law and then go overseas" (Liam, Student, November 9 2014).

He believed that "there is no guarantee that the money spent on those students" will be recovered. He argued:

There has to be some sort of regulatory process - after you finish the studies you work here for amount of time and if you do not, we expect full repayment of what we contributed to your education. It has to be something like that regulating the system (Liam, November 9 2014).

Dr Manning also weighed in on this issue and commented that:

that model of funding likely benefited the individual because we have scholarships that are given, even at Masters' level and those kinds of things and in a number of cases, especially for overseas scholarships, we don't have 100% of those who have benefited from scholarships coming back into the country. So, you have a significant loss to the government in the sense that you spent so much on a person and then that person exits the country and is not able to contribute to nation building. The government is not able to recover any money in the form of taxes that that particular person would have been paying (Dr Manning, November 12, 2014).

One perspective of the model which could be used to support the notion that returns were not maximized under this model of financing, was that even though the model "made for a more educated society, the realization of significant returns was dependent on whether "people were playing their part" after graduation. Downes (2013) pointed out that the "Rates of return studies show that the returns on tertiary level education in Barbados was 18% in 2003." This rate seems comparable with Jamaica's 19% rate of return in 2002 and St Lucia's 21% in 2001.

It was necessary for recipients of state-funded tertiary education to find gainful employment to ultimately support nation building through tax obligations or consumer activity. The inability to become employed, especially in relevant areas of study can certainly affect the rate of return on the investment by the government.

4.5.5 Labour Market Limitation: Impact of Free Movement of Labour

Participants stated that the introduction of free movement of skilled workers across the region and other international employment agreements have exacerbated the labour market limitation by opening up the labour market to suitably qualified regional and international labour. The free movement of skills in the CARICOM Single Market and Economy (CSME) entitled any skilled national from any member state the right to seek employment in any of the states (CSME 1989). In particular, any graduate from the University of the West Indies can live and work without having

to apply for a work permit or visa. This competition could have threatened the employment prospects of Barbadians within the local labour market.

4.5.6 Restricted Expansion of Tertiary Education Sector

According to the participants, the perceived excess output of academics that the economy could not absorb by the prevailing labour market was therefore thought to be at the expense of people who desired technical and vocational education and qualifications, needed by the emerging economy. Mr Richards argued that "university education tends to be more expensive than other forms of tertiary education, like community colleges and tech-voc." He contended that "there is a tendency for the university to suck up the available funds for tertiary education and then you have a deficit in the community colleges or in technical vocational institutions and certainly in the case of Barbados that is what has happened" (Mr Richards, November 4, 2014).

Dr Manning too specifically highlighted the issue of tertiary education expansion and its impact on private provision of higher education. He provided a monopolistic view of the sector at that time and believed that:

it kind of restricted the emergence of an alternative private higher education market in Barbados and that had the effect of smothering diversity in terms of higher education offerings, because there was no incentive for the private sector, since no one was going to pay 4,000 USD or say 10,000 BDS per year in a private university when the government gives you that for free. So, the University of the west indies, being the premier public institution in this country kind of did not have a competition, it never had any competition since it was 100% assured, we are going to get students, the government will give us money. So, incentives to innovate, incentives to do something different, incentives to be responsive to the needs of the market were not there (Dr Manning, November 12, 2014).

Dr Manning also specifically highlighted the impact of state-funded education on the operations at the UWI. He informed that:

When I came here, I was living with the concept that UWI was all this amount of money. [A senior professor] would say oh, I've had the discussions, the government is going to fund 40 million, and because they were so used to it,

they were not... I think, what I am saying is the disadvantage here is that there was no incentive to innovate there was no competition and therefore the diversity of programmes being offered did not need to change, because UWI was assured the students would come in (Dr Manning, November 12, 2014).

Some students believed that the barrier to the expansion of tertiary education was a result of continued focus on traditional academia. Mrs Smith said:

Our parents focus a lot on academics and academics alone, to me to the detriment to the development of the country. Some careers don't need university education that is just reality. And you can make good money and have a wonderful career at so many different things here in Barbados but we tend to focus on just the academic route (Mrs. Smith, September 19, 2014).

She compared the earning power of individuals who had not ventured into traditional academia and suggested that:

A fellow now went and do some mechanic courses up at Polytechnic or wherever they go and you go take your car to him you got to give him \$2000 to just do a little simple something. I'm not sure if a University degree across the border means higher paying jobs (Mrs. Smith, personal communication, September 19, 2014).

4.6 The Introduction of Tuition Fees- New Model

According to the Ministry of Education and Human Resource Development "The financial provision for the tertiary sector has been a cost-intensive undertaking. Between 1977/78 and 1982/83, public expenditure in the sector rose from Bds. \$75.4m to Bds. \$117.0m. The University of the West Indies dominates resources allocation for the tertiary sector" (MEHRD, 2012, p. 16). In this context, the Government of Barbados introduced the funding model in 2014, in which students would pay 20% of the cost of their tertiary education. I will now expand on these findings.

4.6.1 Strength of the New Model of Tuition Fees

As stated earlier, the current model of tertiary education financing required Barbadian citizens pursuing studies at campuses of the UWI to pay tuition fees of 20% of the

total cost of their programmes. This requirement resulted then in students making a contribution to their pursuance of higher education qualifications. The remaining 80% will be borne by the Government. Some of the strengths of this models articulated by the participants were a reduction in Public Expenditure and increase effort at personal success. I will now expand on these findings.

4.6.2 Reduction in Public Expenditure

Expectedly, the study revealed the need for change to the financing of tertiary education. At least one representative from each stakeholder group acknowledged that the public policy shift for tertiary education financing in September 2014 was inevitable as there were continued costs increases associated with larger student enrolment and increased costs of tuition. In addition, the situation was perpetuated as a result of the prevailing economic recession. Mr Richards pointed out that:

Barbados was one of the last remaining developing countries/third world countries that still had a fully financed university education, fully financed by the government - but the harsh reality of the economic [situation] has made that impossible. Now we have moved to a system where the students at the university level are being asked to finance 20% of their fees (Mr Richards, November 4, 2014).

The participants, in reflecting on affordability, chorused that it was seen as necessary to reduce spending in this current period of austerity. Keith perceived state-funded tertiary education to be a burden, given the economic low. He was supported by Sheila, who is considering the model in the context of Government's ability to afford tertiary education as a public good, specifically stated that:

We are living in a society today where the Government cannot afford to be giving away free education at all costs because it is very expensive. It is very expensive throughout the Caribbean so at some point in time.....financing has to come to an end at some point in time as we cannot continue in this form [of financing] (Keith, student, September 19 2014).

Dr Manning reflected on the factors which necessitated the policy shift. He discussed the transition from a fully free public education system to the one you can call direct cost recovery in having the beneficiaries of higher education pay. He posits that: apart from the economic downturn which comes with it the imperative of reducing fiscal expenditure and reducing fiscal deficit, the reality is that the rates of returns to higher education have skewed to the individual, we have the public social rates of return, the benefits that have come to the society from investing in higher education and the private rates of return which in the case of Barbados, though not computed, would naturally be very high since the individual benefits from higher education (Dr. Manning, November 12, 2014).

There was also a tremendous impact of the change in funding tertiary education to the UWI. It was also pointed out that:

"They [the government] withdrew 42 million. So, you take away 42 million, you don't know if that, in fact, that would have been your savings. [And in doing so] you further debilitated the university (Dr Lynch, November 11, 2014)."

4.6.3 Increased Personal Effort at Success

The other main perceived benefit of the financing policy shift was that given the students' responsibility to partially fund their tertiary education pursuits, students would now be increased personal effort at the tertiary level to achieve success responsibility and. Several individual participants recalled experiences of persons enrolled at the UWI whose undertaking of a programme of study was deemed not serious, resulting in an extended period of study and wasted public financial resources. Ms Seale stated that:

There has been a lot of criticism in the country about people going to university and not putting in the effort in their studies as they should or might because they do not feel the responsibility of a cost and therefore as some people say, the government was wasting money on some people. That is how some people seem to see it. The requirement for undertaking some responsibility for the post-secondary education would address that concern of some segments of the population who felt they were paying for people to waste time as they put it (Ms Seale, January 7, 2015).

Other participants agreed with Ms Seale. Students and parents were particularly vocal and agreed that there were "instances where a lot of students took it for granted, not really taking classes that seriously." Sheila stated that:

"Some students who were not paying wasted a lot of time and some were going to the university longer than they should have gone – keep repeating classes all the time - not going to the classes, staying outside – that is wasting taxpayer's money (Shelia, personal communication, November 6, 2014)."

4.6.4. Disadvantages of the New Model

Several disadvantages of the current model were advanced by the participants emanating from the interviews as they discussed the introduction of tuition fees in September 2014. Table 9 below ranks these disadvantages in order of most discussed. These included restricted access to those persons from low income families, minimised options for post-secondary expansion, issues with the implementation scheduled, clarity of the operation of the model and potential impact for long term student debt.

Table 9: Ranking of Disadvantages of the New Model

Disadvantage	Ranking
Requires long term financial planning by parents/guardians	1
Limits access of persons with middle to lower SES to tertiary	
education	2
Model of Financing requires considerable analysis	3
Raises the issue of long-term student debt	4
Does not provide an alternative avenue for persons who can't	
find employment	4

4.6.5. Restricted Access

One of the most common views which emerged from the analysis was that the new model of financing restricts access to those persons who cannot on their own, pursue tertiary education. This perception was strongly articulated by all interest groups. Mr Cave while he stressed that "it is a model that can work" he acknowledging that

the imposition of fees would present barriers to the tertiary level education by "the poor and the vulnerable." Others, however, seemed sceptical and provided stronger criticism of the current financing model. For example, Mr Haynes stated:

I think it is a backward step. You have to lead the country where you want it to go and as first world country... Our resources are our people; we have to invest in our people. It regresses to any first world status; we have to have that in place. It is to deny people of particular economic status the right to university is a backward step in some regards or less there is some system in place to means testing that we can push those people through, I think it is a backward step (Mr Haynes, November 6, 2014).

Ms Seale supported this notion of limited access and stressed that:

There is still a segment of the population which has very definite and clear economic challenges and whose members will have difficulty meeting the requirement of the tuition fee. That is not one of the things that t think would serve us well (Ms Seale, January 7, 2015).

Tertiary level administrators and educators were even more critical of the model which has been implemented in September 2014. Very strong terms like catastrophic, alienation, an assault upon democratic rights and freedom and a strategy to drive the masses back into poverty were used to describe the model. Dr Lynch stated that:

I'm seeing students, good students, students who actually did well drop out because they can't afford it! Some of them come in, they try, but then the situation is, you know, the university has a plan, but the university can't extend a plan for years, it has to be semester by semester. Otherwise, the university is going to kill its own self so then you have this situation now where the university can't give them beyond a certain time, the students come in thinking they can, but that an extra \$500 and something that they have to pay every month. Neither students nor their parents can afford it! So, what we have right now as a society is a very elite group of students (Dr Lynch, November 11, 2014).

Professor Harris strongly perceived that the implementation of the model supports Barbados' return "to a world in which privilege will appropriate education and the masses of the people will be excluded." He informed that:

Already we have seen close to a 30% drop in the number of Barbadian students attending university. This is catastrophic; it is a 30% drop in the enrolment of an institution in one year. It is catastrophic. It has signalled the alienation of the working class from the university. It is being read by them as an assault upon their democratic rights and freedom; it is seen as a strategy to drive them back into poverty. The impact of it will be catastrophic for the purposes of social upliftment and material development and we will - if it continues like this - we will see the implications 10 -15 years from now. Already I believe that it is creating in the country a philosophy of those who have and those who don't. It is creating a philosophy of middle-class privilege and access. It is creating a notion that the university is beyond the reach of the common man and woman who have worked hard for this country. That is something that this country has sought to move away from over the 50 years of Independence. So I think it is a reversal of many of the things that we have believed in and I think it was not inevitable because I do believe that with much more careful thinking we could have found another way or other ways to achieve a reduction in public expenditure without gutting the poor in this way (Professor Harris, January 29, 2015).

He strongly articulated that:

The notion of the state through public revenues, investing in a historically disenfranchised people is consistent with the values of equity, creating a just society and it is a principle on which democracy rests. The question is: has the process of empowerment and upliftment has it reached a stage where the policy was no longer relevant? The answer to that question is that in Barbados the country has not reached that stage. The process of upliftment and empowerment is not complete. The black community has still not been elevated into the corporate community (Professor Harris, January 29, 2015).

The cost-sharing model as in the case of Barbados was implemented at a time when the variables of unemployment and the cost of living were high. It was largely viewed that most families struggled to meet regular household financial commitments to maintaining shelter (mortgages or rents), and food, with little to no income remaining to pursue studies at the tertiary level. Liam, a student, highlighted a perceived discriminatory element of the current model and provided an example to support his view. He said:

you start a programme with a plan and you know you only have to pay x amount money and you might have done the most just to get that \$850 to pay those amenity fees, now you have to pay three times that, more than three times that to pursue your area of study, I think it is a bit unfair. You are taking education away from people who just cannot afford it who may after they have completed their study makes a real impact on society (Liam, November 9, 2014).

It must therefore be acknowledged that the public policy consideration for tertiary education was not only that "Access to tertiary education [should be] at a reasonable cost to meet mid and high level skill needs" as Downes (2013) points out, but also to ensure that those middle to lower income earners who sought after tertiary education, were financially able to do so. According to Marcucci, Johnstone and Ngolovoi (2008), to address this issue, there is a need to seek revenue supplementation in the form of cost- sharing.

4.6.6 Minimizes Options for Post-Secondary Activities

It is necessary for developing countries to provide appropriate and adequate post-secondary avenues for young persons within society. The Ministry in 2012 articulated a plan which would be flexible enough to "open avenues for students to take some responsibility for self-funding, especially as it relates to "the models of discontinuation and resumption of programmes, as well as "new models of instruction" at the tertiary level.

The implementation of the new financing model for tertiary education in September 2014 was perceived therefore as a barrier to one of the legitimate options for post-secondary pursuits. Dr Fields believed that given the very limited prospects for employment, the model does not provide an alternative for persons who cannot find employment. He stated:

I don't think that the economy is in a position to absorb these persons in entry-level jobs. So, therefore, the university would be the best option available. You have deferred employment, so having deferred employment; education would have been the next best thing (Dr Fields, November 11, 2014).

He further believed that providing adequate post-secondary educational opportunities would:

Reduce that unemployment statistic because the persons would be in full-time education as opposed to being - looking for employment. You know it really helps so you would still be able to develop the cadre of professionals that we are always known to have. So [by providing educational opportunities] we [would] continue to develop individuals and therefore you would now find that the undergraduate degree becomes like the basic benchmark for entry into the job market (Dr Fields, November 11, 2014).

Worthy of note is that public sector employment requires a minimum of four Caribbean Secondary Examination Certificates, (CSEC) for clerical positions, while most other positions within the public sector will require at least a first degree in a related area of specialization. In addition, given the changes in labour demand as a result of an increase in non-traditional businesses, private sector offerings to require specialized skills, which often beckon prospective employees who are the holders of relevant university degrees. Dr Fields pointed out that the undergraduate degree has become like the basic benchmark for entry into the job market, and so, tertiary education would ensure the development of a cadre of professionals that Barbados is known to have.

4.6.7 Timing of Implementation of Model

Some participants felt that even if there was a policy to introduce tuition fees, it could have been done in a gradual process as payment for tertiary education required long term financial planning by parents and guardians. Liam believed that the timing of the change to financing tertiary education was unfair and posited that:

You [people who would not have had the opportunity to pursue study in areas where they might not have been able to afford it] for like three years, he just wants to be a lawyer, he just wants to be an accountant, and halfway through

the study where he thought he was only paying \$800 for the guild fees, amenity fees and what not - then you have to pay \$3600 a year (Liam, student, November 9, 2014).

Another perspective appeared to take issue with the timing of the policy and subsequent implementation. Dr Lynch suggested that:

If this model was going to be implemented there should have been at least a 3 to 5-year leeway where people were told the model is going to happen and this is what is going to happen. [Information provided should have identified] these are who are going to be paid for, [those] who are going to be taken care of, and the bursaries that are available. It would, therefore, be known that you are taking care of the disadvantaged - economically disadvantaged in society - that aspect [would be] maintained. Instead of that, we got in 18 months or so, this thing is going to happen and up until August, prior to September, the government gave no clear indication of [those] bursaries, what bursaries would be available, who they would be available for etc. (Dr Lynch, November 11, 2014).

4.6.8 Clarity of the Operation of the Model

The operational issues which presented themselves at the UWI appeared to have been compounded as a result of subsequent to the imposition of students' fees. This was primarily so as the details of the policy framework appeared to lack clarity, stakeholder involvement and public disclosure. Dr Lynch stated that:

"This current model was only articulated in the Finance Minister's speech. It was never written down but by the equation I mean he said if the students are paying 20%, we save 42 million dollars from what we give the university (Dr Lynch November 11, 2014)."

Others agreed and believed that the timing of the communication was insufficient. Liam stated that:

There was not enough notice. I think a three-year notice would have been appropriate to give anybody who was thinking of entering UWI time for families to plan and also for first-year students who would not have had the finances to pay 20% of the cost (Liam, November 9, 2014).

Dr Manning opined that:

The implementation was not well planned. It almost amounted to a knee jerk reaction. It was not consultative. It could be consultative at the cabinet level but not consultative with the masses, [therefore] it particularly did not capture the voice of the masses.... and this to me is the students and the parents. Having said that, how would have it best been done that would have saved the many problems with the implementation. One is that the government should have informed early. I mean one would have said it is inevitable, it was going to come but to be fair, I was UWI the other day and the current director of the school of education told me that they have 50% reduction in enrolment and some of the continuing students are saying they are not sure if they will complete (Dr Manning, November 12, 2014).

4.6.9 Potential Impact: Long Term Student Debt

The implementation of the current model also raised the issue of long-term student debt. Mr Richards highlighted student debt in the United States of America and pointed out that:

If one follows the situation in the United States where student debt is a big issue one has to look carefully at the USA so that you do not fall into the same trap - students having the education but the debt that they owe on graduation is so great that it prevents them from advancing in other areas, they spend a large part of their working life repaying student debt (Mr. Richards, November 4, 2014).

Mr Richards reference to the crisis of student debt in America in this instance appears to be justified as there is a wealth of information surrounding the amortization periods and the financial stranglehold that characterize student loans. According to an online article, "Americans owe over \$1.48 trillion in student loan debt, spread out among about 44 million borrowers. That's about \$620 billion more than the total U.S. credit card debt. In fact, the average Class of 2016 graduate has \$37,172 in student loan debt, up to 6% from last year," May 1, 2018, A look at the Shocking Student Debt **Statistics** for 2018. Student Loan Loan Hero, https://studentloanhero.com/student-loan-debt-statistics.

Stiglitz (2013) argues that "everyone recognizes that education is the only way up, but as a college degree becomes increasingly essential to making one's way in a 21st-century economy, education for those not to the manner born is increasingly unaffordable." He further points out that "America is distinctive among advanced industrialized countries in the burden it places on students and their parents for financing higher education."

Stiglitz' view regarding the burden of self-financing tertiary education was raised by Mr Kent and he reflected on the financial weight of students having to pay 20%, especially as "it was just brought one time at 20%. He believed that it was too much for the students to carry in the majority at that stage and further commented that:

those [students] who couldn't get loans and didn't get a bursary, those are the ones that are challenged and we still got to think about those because some of those may be bright kids who just need an opportunity to get a chance to excel and they are going to be deprived of that and those are the ones I am more concerned about cause not having the funds and having the ability - it can frustrate them and lead them to a different area (Mr. Kent, December 17, 2014)

Johnstone (2003a) opines that to avoid students who are saddled with debt for an inordinate length of time, students' loans should be designed to collect the principal which was borrowed. Additionally, measures must be put in place to increase the efficiency of the collection process of repayments and maintaining accurate records; thereby, reducing the hassle and burden on the student.

4.7. Alternative Financing Models

The participants recommended alternative models for financing tertiary education based on two principles. The first group of alternative models proposed appeared to be premised on the notion that education should be publicly delivered; the second group relating to self-funded options for pursuing tertiary education and the final group based on the mixed-model (cost-sharing) approach. See Figure 7.

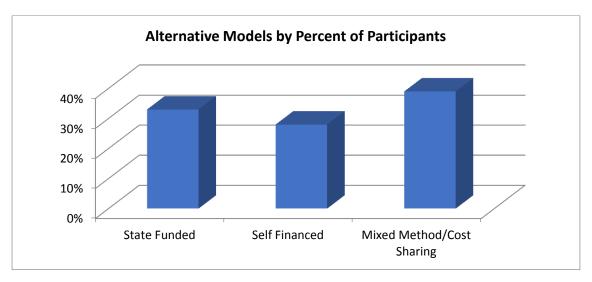


Figure 7: Alternative Models by Per cent of Participants

These models highlighted the government's social function and in the context of Barbados, its traditional responsibility for the provision of free education. In this regard, theory relating to public investment in education and the positive impact of the development of human capital on economic growth and social development has been supported by this study. According to information obtained as a result of this study, the specific gains from public investment in higher education in Barbados were realized through greater access to graduate and post-graduate programmes at the UWI, which engendered social mobility and economic development, in a society characterized by Professor Harris, a Senior Tertiary Institution Administrator as "one of the poorest black communities in the Caribbean."

4.7.1 State-Funded Education

The most commonly proposed model was one in which the government should finance degrees. However, participants advocated several conditional factors upon which the state should finance tertiary education. These included labour market demand, student performance or socio-economic status.

4.7.2 Needs Assessment: Labour Market Demand

Participants further recommended that the financing of degrees should be based on labour market demand. Andrew suggested that a demand analysis of the skills required in society should be conducted. He suggested that this would allow for more

appropriate use of resources, and a reduction in expenditure on tertiary education as a result of not funding programmes for those shills which are not heavily demanded. He believed that those programmes which are required by the labour market should be funded and the acquisition of skills which are not in demand should be the responsibility of the individual. Keith was in agreement with this model and the notion that "some type of research [should be carried out to] find out what's needed in the country and [that the Government should] subsidize those degrees." He, however, believed that:

"[enhanced] stringent measures should be [implemented and monitored for these programmes] and if someone fails [repeatedly then you should be asked to withdraw] (Keith, Student, September 19, 2014)."

The key ramification of this model was that degrees are financed based on labour market demand, may not be of interest to persons. This would result in some wastage of government if students opt to pursue areas just for the sake of having a degree. Additionally, the country may still be short of particular skill sets if students decide not to pursue the areas for which the government will be funding. Therefore, as Moore (2016) suggest students should be provided with information on the labour market before choosing a particular course of study.

4.7.3 Financing based on Student Performance

Dr Fields also suggested that student performance could be used as criteria for funding tertiary education. He especially advocated for the indigent poor and suggested that the student could obtain a loan and that once:

[the student has] performed well. You've graduated with a good first class honours degree or something like this, then [the government] could say to you ok, I am willing to convert 10%, 20% some percentage of this into a grant that would be paid directly to student revolving to reduce your loan indebtedness (Dr. Fields, November 11, 2014)

Specifically, "the Student Revolving Loan Fund could, [based on established thresholds] could review the performance of those persons who were granted student loans and who meet the performance criteria for the award of a grant.

Mrs Smith also raised the issue "of the scholarships and that is something that we need to do, even outside of this whole university funding thing."

4.7.4 Establishment of a Tertiary Education Fund through a Levy

The establishment of a tertiary education fund or tertiary education levy would mean that that "every single working person would contribute to that fund, and that fund would not only support university education but would also support education at other tertiary level or higher education and institutions." This model was proposed by Mr Cave, a policymaker, who posited that while "it might appear similar to the original model but government would not have to take from the consolidated fund the total amount [for funding tertiary education]". He suggested that:

This would be a levy, [which] could be imposed on the working person or it can be imposed on all goods and services produced within the country and if it is, in fact, that case you should be able to generate enough money to support tertiary education. If [however] for argument sake the funds are not enough to cover the total costs, the State can still provide support through the consolidated fund. You would not have to worry about burdening [students] or to look for all these bursaries and scholarships etc. (Mr Cave, November 6, 2014).

He further suggested that:

The funds could be managed by a higher education commission for the dispersal of the funds. It also means that a student revolving fund would not have to be constantly looking for new resources of finance to replenish itself from time to time. You would not have to pursue a larger number of persons who default on their loans - the Revolving Fund needs the money coming back in to help support new entrants (Mr Cave, November 6, 2014).

Mr Cave (November 6, 2014) indicated that the first key benefit of this model is that:

It gives everybody in society an opportunity to contribute to the development of the country. Everybody benefits from all the services provided - their children or they themselves would have access to that education. The support would also be provided to those persons that are accessing education abroad in programmes of study not [offered] at the University of the West Indies. He

believed that this model would also "eliminate a lot of the bottlenecks that can occur and the frustration that young persons might feel where they don't have access to the resources to fund their education.

This model could not be implemented without ramifications and as there might be a further public outcry as already there are other state-imposed taxes. The state will be taking from everybody who works or who participate in the economy, that is, by way of taxing wages and salaries or the imposition of the levy on goods and services whether produced locally or imported.

To counter this ramification, Mr Cave (November 6, 2014) suggested that if the tax should be imposed on goods and services, and not directly on the wages and salaries of persons. He favoured the indirect model and stated that "if you pay 5% or 1% levy on all goods and services produced in Barbados and our economy operates let us say at 8 billion dollars 1% every year would generate \$80 mil"

This model allows for more direct distribution of resources to other aspects of post-secondary and tertiary education, producing the graduates that are being demanded. This could also have the effect of expanding the whole area of tertiary education, not just university education.

Additionally, this model of the tertiary education levy could have the value of raising the stakes in technical vocational education as being much more viable than previously thought. The view was held that traditionally, persons went to the university because that is what they were supposed to do and they did not really consider the professions out there. Within recent years, there has been a shift from academic qualifications towards a greater exploration of technical vocations, making local and international technical and vocational colleges and educational institutions more appealing to prospective students.

4.7.5 Increased Taxation

The recommendation to finance tertiary education through increased taxation was proffered by Jasmine because it lent itself to contributions from more stakeholders and by extension leads to students being motivated to excel. Salmi and Hauptman

(2006) posit that the tax benefits are provided in the form of family allowances for students attending tertiary education institutions in France. Since there is the expectation that graduates of higher education institutions will be employed in middle to high-income professions, the taxes paid by these individuals will be significantly more than the programme expenditure per student. This model would ensure that the government has not abdicated its social responsibility, by being able to increase revenues to facilitate tertiary education, thereby reducing the social problems that could exist when a population is not highly educated.

4.7.6 Conditional Financing: Needs Assessment; Means Testing and Student Performance

The major reasons proffered for these models would be that implementation facilitates employment after study as well as greater efficiency in the use of government's financial resources, especially in the current recessionary period. Participants further suggested that these models were necessary for social stability. Other benefits included a declining unemployment statistic, labour market equilibrium by finding out what is needed for our own national development and supporting those areas which can realize greater economic and social development for the country.

4.7.7 Means Testing: Establishment of Criteria for Bursaries

Dr Lynch (November 11, 2014)

Advocated a model in which the social conditions of the individual are considered and based on the agreements between the university and the government, the financial obligations of the government to the University of the West Indies. In the case of the individual, Dr Lynch suggested that "the criteria [should be clearly defined]. Primarily, the model should facilitate through a needs assessment, the identification of "those who can afford to pay [and] those who can't afford." She indicated that the state-financed bursary system would then provide grants to those students who qualify for bursaries.

She went on to say that the basis for suggesting this model was that:

Barbados is going to be in a hard place socially for the next 2 -3 years counting this year. There are going to be many young people who aren't in school but who aren't doing anything. That will impact the crime rate. This

was guaranteed. The social fabric will be affected, you know, the use of drugs could go up, because young people who are not occupied will find things to occupy them. That is just the reality of any life and Barbados is relatively small, those who can send their young people away, which will be a brain drain. People will feel well if I got to pay, let me pay someplace else. And Dominica is a good case in point, the young people in Dominica as soon as they can, they leave, they leave. The cost of living is going to go up because there is a lot more to the government that they have to address. Right now, the - and so basically it is going to add to the challenges that this society is currently experiencing because of the economic recession that has nothing at all to do with that, but it will definitely add to the burden, the economic and social burden in society (Dr Lynch November 11, 2014).

She specified that the details of the model would include "the payment plan for the money that is owed to the university. So, all of the structures are in place to support a model whereby students are aware they have to pay but the value of education in this country is sustained through the structures that are set up." She believed that this was also an opportunity to get "the young people to take themselves more seriously" as it relates to planning and investing in their future.

In order to reduce issues relating to access, governments are known to introduce financial aid programmes. In some territories, financial aid programmes to supplement tertiary education study are applied to all students. In others, these programmes are provided to students who meet specified criteria associated with low incomes and other inequalities. These means-tested programmes allow for the provision of waivers, transfers and grants primarily to students from low socio-economic strata, and provided a mechanism to improve representation in higher education institutions and minimize dropout rates.

In Barbados, The Higher Education Financial Support Policy was implemented in 2015 to provide financial assistance to Barbadian students who were pursuing studies at the University of the West Indies. This policy was introduced to mitigate the impact of the introduction of tuition fees. Grants awarded used the Annual Household

Income and consisted of Full and Partial Grants. These values of the partial grants amounted to 30% or 50% of the tuition fee, while the full grant paid the entire tuition fee.

4.7.8 Establishment of Needs Assessment Policy and Practice

The suggestion was made to embark on the system of means testing which would distribute some of the higher educational subsidies such as low or no tuition fees or grants on the basis of the student's family's need or ability to pay. Marcucci and Johnstone (2010, pp. 7-8) and Fack and Grenet (2012, p. 8)) pointed out that "the success of student assistance policies rests on fair and accurate means-testing that ensures financial assistance to eligible students and not to non-poor students. The point must be made again, that before 2013 the model used to finance tertiary education was one where there were no tuition fees and, therefore, the question of access was not an issue for the poor or disadvantage student from the working class or for the student from the wealthy background. As a result, therefore, structures would have to be put in place for a regime of means testing if subsidies are being considered". Dr Fields too articulated his proposed model based on the practice of needs assessment. He believed that:

some consideration really should be given to the under-privileged - those persons who were really, what we would call the indigent poor, who may be bright, but would want access and don't know how to access the education. So maybe within the model, there should have been some scope for us to be able to assess need and be able to say to those persons who have potential but have [a] need that there could be some accommodation that it could work out (Dr Fields, November 11, 2014).

Mr Haynes supported this and suggested that "[Government] should fund those people for the duration of the programme, but not go beyond that. If they [the students who are being funded] go beyond that in terms of failing their courses and what have you they should fund that portion." He reasoned that the model was developmental as it "would give the less fortunate an opportunity for tertiary education. He believed that adequate systems were in place to identify those who needed support. He, along with Mr Kent suggested that it was necessary as:

"this was a sign of the times, government finds itself in a financial position where we have to be more prudent in terms of our spending so this would assist in some regard in taking that money that would we normally spent on students and divert it to where it is actually needed" (Mr Richards, November 4, 2014).

Dr Fields believed that it would be expected that while human capacity enhancement is of paramount importance to social and economic development, students who attend the university would be expected to pay upon graduating in cases where there was unceremonious time wastage by the student. He believed that "if some students can access some means of a grant or something like this, [that they might] appreciate the importance of performance.

He further believed that if [the Government] does not implement something to help them [persons from the lower economic brackets], those will fall back so that we will not be able to [contribute to] the upward mobility for [them] and their families:

so if we do not look at something, to deal with those then we would have a challenge because at present, of those who are unable to pay, you might have had a single parent who has the first child in the family that would be ready for university but still have others still going to secondary school, and things like this, who would have wanted that little help, as the present model could cause a delay in some persons' ability to pursue tertiary education (Dr Fields, November 11, 2014).

4.8 Self-Financed Models

The second group of models was presented with the view that individuals should be held responsible for tertiary education expenses. It was therefore proposed that tertiary education should be financed through personal insurance and investment schemes by encouraging parents to purchase insurance policies or invest in funds which would pay for the university. It was also suggested that the government should offer tax incentives for persons who invest in tertiary education instruments.

4.8.1 Tax Incentives to Invest in Tertiary Education

A proposal was made that there could be a strengthening of the current model with incentives. Salmi & Hauptman (2006) posits that "the tax benefits may be in the form of a tuition grant that offsets a portion of tuition fees paid or help parents to offset the expenses of supporting children while they are enrolled in tertiary education" (p. 53). Mr. Richards proposed that:

Government [could] offer income tax incentives for people to invest in university financial instruments that would allow them to pay fees or other costs associated with university education. People have to come to the stage where they see their access to university education as an investment and an investment by the student in their own future. The quicker people come to that realization so they may actually decide not to invest the money in university education but invest it in other forms of tertiary education, technical vocation or the community college. It may call for an expansion in the facilities that provide technical vocation or community college education at the expense of the UWI, but they could begin to see it as an investment. They make the initial investment and that is what is recouped in the earlier years of their employment - they would be repaying the loans that they have taken (Mr Richards, November 4, 2014).

He believed that this model would place greater emphasis on other institutions offering technical vocational areas qualifications. This he said would, therefore, represent an alternative to broaden the scope of options of people considering tertiary level education. He said that this model will:

allow us to direct more resources to other aspects of tertiary education than the country benefits because it begins to produce more and more tertiary level graduates that are in demand in the economy and it can have the effect of expanding the whole area of tertiary education not just expanding university education but the entire area of tertiary education. The more people that access tertiary education the better off the society is in terms of its economy, in terms of its society, in terms of its sociology. We used to think that it was access to university education, but now I think we have to emphasize access to tertiary level education (Mr Richards, November 4, 2014).

Mr Richards believed too that long-term student debt would result in not adopting this approach.

4.8.2 Payment Plans

The model of payment plans was also suggested because the payment plans would make it easier on the students and or sponsors. Sheila indicated that some persons with whom she interacted queried whether there could be a monthly payment system. She indicated that she knew of an acquaintance who "pays UWI \$750 a month." She indicated that "some persons were unable to pay" as she reflected on Government's expansion of the Student Revolving Loan Fund, a scheme, which as Salmi and Hauptman (2006) believes would show that the government would not have abdicated its role in financing education. (Sheila, November 6, 2014)

4.8.3 Student Loans

Another aspect of the cost-sharing model is the notion that a portion of the cost must be borne by the students through student's loans where the share of the costs will be deferred into the future when the student is likely to be in full-time employment. At present, there is a Student Revolving Loan Fund where loans are given to students for any area of study with a repayment period of four years with a two-year grace period after completing studies. The participants posit that the framework for higher education financing could be strengthened through government reform or recapitalization of this student revolving loan fund. The loan fund programme should be for the purpose of higher education with a means testing mechanism (Salmi and Hauptman 2006). The participants stated that loans would be provided to all students who have enrolled but don't have access. Those who have enrolled, but have no ability, because the means testing shows that they are in the second or third level of income would get a bursary. Students with extremely high IQs would receive a scholarship in the priority areas as identified by the Government of Barbados. So, in that case, a system would be created that ensures everyone is able to pay for their education. Furthermore, participants indicated that there is a need to reduce the administration costs of this programme and ensure that the funds will be there for the students. Johnstone & Marcucci (2007) state "that more countries are looking to students' loan schemes as ways to allow students to bear a portion of the costs of their higher education" (p. 23).

The only ramification of this model of financing was student's default on the loan payment. Dr Lynch commented on this and highlighted the efficiency of the student loan payback system in America. She said:

America has a social security system so if you don't pay back your loan and 15 years later you get a job, as soon as you start to pay, the government starts to get the money. Our ID system doesn't work as efficiently so there are a lot of people that default on their student loans but America has a way that it could take them 50 years to find you but they will find you. Here I don't know that, because even now there is a loan scheme here that when people go away and they don't continue but that part would definitely need to be enhanced If we could now encourage banks and all of the corporate structures in society to use the ID system (Dr Lynch November 11, 2014).

Regarding student loans, Dr Manning, (November 12, 2014) suggested that the government should "recapitalize the revolving student loan fund and move it to a higher education loan programme and then capitalize it sufficiently in the first year to prepare it to be able to give more loans." He further expounded on the notion of strengthening the framework for higher education by stating that:

(1) The loan programme would have to be reformed; it will have to be called something like a higher education loan fund. It has to be restructured (2) it has to be recapitalized. One year in advance to be able to give loans, bursaries and scholarships. Loans will be given to all deserving students. I mean to all students who have enrolled but don't have access. Those who have enrolled, but have no ability, because the means-testing shows that they are in the second or third level of income would get a bursary. The very bright students would get a scholarship. And they get a scholarship in the areas that the Government of Barbados has prioritized as what it needs to invest in. So, in that case, you will create a system that ensures everyone is able to pay for their education but will be able to recover the money (Dr Manning, personal communication, November 12, 2014).

4.8.4 Personally, Financed through Insurance/Investment Schemes for Education

Personally, financing tertiary education through Insurance and Investment Schemes was also seen as a viable model of financing tertiary education. This supports the cost-sharing model of financing higher education where the parents finance portions of their children's higher education expenses from current income, savings, or future income via borrowing. It was advanced that people have to come to the point where they see their access to university education as an investment by the student in his or her own future.

Jane noted that she had "heard of possible insurance schemes, investment schemes where [parents] must enrol your child from birth so that you are actually paying or contribute to a scheme. As I said it came so suddenly it put you out of pocket." She advised that "parents who have younger children [should be advised] to save something towards their child education" (Jane, November 6, 2014).

Mrs Smith (September 19, 2014) suggested that the option of "buying policies or [saving] money in funds [to] pay for the university later on" should be encouraged as this was an international practice.

It was believed that this model would free up resources to improve infrastructure and other sectors in the economy and strengthen social services. Further, this model could assist with the attainment of a financial position where the government is prudent in terms of its spending, especially in light of the economic difficulties. Primarily too, self-financing of tertiary education would facilitate a reduction in government expenditure at a time when public debt is high.

This model would also stimulate private provision because there would no longer be the subsidizing of public higher education. This would provide the room for the entry of other private providers which would generate benefits such as the diversity of programmes to be offered and the modes of delivery. The participants suggested that these institutions would, in turn, employ more lecturers and more administrators, thereby, improving the figures on employment and increasing consumption thereby increasing economic benefits.

4.9 Mixed Models

One of the models proposed was a mixed model of financing. This mixed-model financing was mainly proposed by the tertiary institution and one public sector administrator. Mr Kent and Professor Harris clearly articulated the model which would consist mainly of the partial payments to be facilitated by students and by Government.

Mr Kent (December 17, 2014):

Believed that it should be a blended process where the student is paying part of the cost and the government is paying the other part of it. He strongly suggested though that the University also needs to expand its range of fundraising as well through international donors and those sorts of things to add to its fund base. We have already done a lot of that because when I came here would have been like an 80-20 model period, we are down to almost a 60-40 model, where the government provides 60% and we raise about 40%.

One variation of this model was a tripartite approach which Professor Harris said would see the state continue to discharge the principal share of 80% and that the:

Students would pay 5%. The private sector, the employer, the private employer class should pay 15% and a levy could be used, a tax could have been used, a special corporate fund could have been established for the purposes of education because education is the building of the human resource (Professor Harris, January 29, 2015).

With the model of cost sharing, the private sector would also be called upon to invest in the systematic and strategic building of human resource capacity, integrating this activity into their overall operations (Johnstone 2003a). As a proactive measure, private sector organizations such as banks, and insurance companies that reap substantial profits would plan for the next generation of their employees. This would be done through the allocation of a share of their profits for the education fund and for the education levy. The proposal of 80% government, 15% private sector and 5%

students (80-15-5) model would create a new environment for planning much more scientifically.

The model of mixed model financing was advanced because this model facilitated contributions by more stakeholders and it eliminates the negative impact of the new model on the social and economic fabric of the Barbadian society. Most participants believed that the student rate of 20% led to a major reduction in enrolment within the University. This was believed to have occurred because given the extent of poverty within the country, given the fact that 80% of students at the university are from working-class families, living in poverty, it was a devastating blow to the working class.

This model was first proposed by Johnstone (1986) in which he stated that all higher education systems were financed by four sources; the taxpayers or government, funding the public institutions and some student financial assistance, "the parents who finance portions of their children's higher education expenses from current income, savings, or future income via borrowing, the students who finance their share from savings, summer earnings, term-time earnings and future earnings via a variety of governmental and private loans, and donors or philanthropists, including individuals, corporations and foundations financing certain higher education expenditures through either endowments or current giving" (p. 202). Since then this model of cost sharing has increased throughout the world albeit with a variation of the term such as cost recovery or user charges (Woodall, 2007). The expected benefits as stated by the participants that would be derived from this model would be that the state would continue to be the principal investor, but the investment would be reduced significantly. Johnstone (2004a) supports this view and posits that the most compelling "case for cost-sharing is simply the need for additional higher education revenue" (p. 410)

The expected benefits that would be derived from this model would be that the state would continue to be the principal investor, but the investment would be reduced significantly. The private sector would also be called upon to invest in the systematic and strategic building of human resource capacity, integrating this activity into their overall operations. As a proactive measure, private sector organizations such as banks,

and insurance companies that reap substantial profits would plan for the next generation of their employees. This would be done through the allocation of a share of their profits for the education fund and for the education levy. The proposal of 80% government, 15% private sector and 5% students, (80-15-5) model would create a new environment for planning much more effectively.

The participants further posited that this model was necessary for social stability and the strengthening of democracy. The participants also noted that this model was enunciated because working-class people, who have borne the brunt of the development of Barbados, have an ethical and moral right to have their education funded by the state. Woodhall (2007) opined "that in any strategy of cost-sharing there must be a system of financial assistance to ensure access for able but needy students" (p. 27), a statement supported by all of the participants.

Further, the government finds itself in a fiscal position where fiscal prudence must be paramount and this model would assist in some regard in taking the money that would normally be spent on students and divert it to where it is actually needed, but still to the benefit of the developmental aspects of the human resource as posited by participants.

In addressing the ramifications of the model, the participants suggested "that if degrees are financed based on labour market demand, some areas may not be of interest to persons. There is also the concern that the movement of upward social mobility might be affected if the model is not adopted (Tewarie 2010; Louisy & Crossely, 2011)

4.10 No Model: Opportunity for Appraisal

For some participants, it was difficult to offer a suggestion. Ms Seale for one indicated that she could not suggest a model. She believed that:

There are a number of elements that are going to have to be taken into account. The reality of the government financial capacity has to be taken into account, notwithstanding any perceived social obligation now, to my mind

there is a difference between a social obligation and a desire to provide a social safety net. The contribution of an evaluation of the investment in financing [is worthwhile]. For example, if you look at the cost of providing a post-secondary education as an investment, the return on that investment - there must be some way of trying to quantify it and determine whether it- the degree to which the investment [should be made] (Ms Seale, January 2015).

4.11 Conclusion

The fundamental underpinning of the provision of tertiary education in Barbados lies on the premise that higher education contributes to upward social mobility for individuals and that as higher education creates significant benefits to individuals, society and economies. Proponents of the human capital theory have attributed increased innovation and higher productivity to higher education. Higher education allows for the "transmission of values, development of knowledge, and higher earnings and more satisfying jobs," Barr (2008, p. 27). But higher education with no barriers to access comes at a cost. Over the years, countries have wrestled with expanding access without increasing public debt and placing a further burden on the taxpayers.

The demand for new knowledge and skills to drive the development of new economic sectors has in part driven up the demand for higher education qualifications. Worldwide, technological advancements have reshaped the global market place. Unless governed by trade restrictions, multinational corporations are free to demand and supply goods and services across territories, giving rise to greater competition. In Barbados, as noted before, the shift from mainly agriculture to service-based industries also heightened the need for public investment in higher education.

Several findings from this research correspond to the findings as documented in the vast spread of literature on financing higher education, the first of these being that state-financed tertiary education resulted in greater opportunities for access to individuals at every level of society, and thereby promoting equity. Thus, this model of financing allowed the child of the agriculture worker to attend the University and to

sit in the same class as the child of the manager. There was also consensus that the traditional model has also been responsible for the rise from the lower socio-economic status of the majority of the Barbadian population to the point where there is middle class. Thus, the social benefits of education and private benefits were realized as a result of the human capital investment (Riddell, 2005).

In addition, through government funding and the flexibility of the UWI programmes, females, like their male counterparts, were able to participate in tertiary education; an opportunity female took full advantage of. There however has been a divergence of views regarding the "causal relationship" between state funding and participation in tertiary education. de Gayardon (2016, p. 13) notes the "widespread sentiment that making higher education free will improve the system," Barr (2008, p. 35) highlights the view that "the primary driver of participation in higher education is attainment in school."

The issue of access is believed to have nurtured the social development of individuals and the growth and development of Barbados' economy. Primarily, it was thought that access to free tertiary education produced an educated and skilled labour force which was made up of a class of professions. Graduates of state-financed tertiary education were not only able to contribute to the growth of the local economy but participated in regional and international labour markets. These activities also generated significant benefits to the local economy.

One of the main views which also emerged was that consistent investments in students to pursue degrees at the UWI resulted in a restriction of the expansion of the post-secondary and tertiary education sectors. With the opportunity to pursue a higher education qualification, with minimum matriculation, nationals were more likely to enrol at the Cave Hill institution. Students would self-finance programmes being offered online or with a local private provider. In addition, it was strongly articulated that investment in technical and vocational programmes was significantly limited as a result of the government's commitment to higher education for its citizens.

The study also revealed though that open access resulted in an exponential increase in government expenditure as enrolment of Barbadian nationals more than tripled within

the last decade. With a declining revenue stream and no policy regarding the level of financing, government debt to the UWI was characterized by sustained increases. The situation ultimately became untenable and the government was forced to consider policy reform which would encourage access; raise attainment (Barr 2008), and reduce public expenditure.

The institutionalization of the payment of tuition fees was believed to have resulted in a drop off in enrolment at the UWI. Though the policy change did not come as a surprise, many felt that the model had the potential to restrict access to tertiary education for persons from the lower socio-economic strata of the society. Participants opined that the model had the potential to increase personal effort at success and certainly a reduction in public expenditure. Students who wanted to continue solicited loans to continue for as long as they could. There was also the view that student loans could lead to long term student debt. Barr (2008, p. 29) argues that beneficiaries [of tertiary education] should bear the cost for the private benefits he/she receives "when they can afford them when they are graduates and not as students".

Barr (2008) further contends that student support should be through a well-designed income-contingent loan, part of which is paid by government revenues from taxation, the other part by income-contingent repayments. With reference to the Australian experience with Higher Education Contribution Scheme implemented in 1989 through an income-contingent loan, Chapman, (2011, p. 104) points out that "extensive research into the implications of the scheme for the access of the poor to universities reveal that there have been no discernible effects." Barr (2008) and Chapman (2011) both highlight the significant challenges regarding weaknesses in the administrative framework for the effective collection of income-contingent loans. The Student Loan Revolving Fund in Barbados also experienced problems with the collection of loans. The Loan Fund was geared towards students pursuing tertiary education qualifications at the UWI and international universities and the approval of loans was based on repayment of loan proceeds upon completion of the study. Within recent years, alternative models were used to collect monies from students who were indebted to the Fund.

Responses to the second research question provided a number of alternative models. These include models of conditional financing and self-financing models. The conditional financing includes the establishment of a tertiary education fund through a levy, finance through increase taxation and needs assessment based on labour market demands. The self- financing models include repayment plans, tax incentives to invest in Tertiary education, financed through insurance and investment schemes and mixed model finance. One of the most preferred models identified is the mixed model of financing which involved the contribution of government, parents, students and the private sector. As stated by Woodhall (2007) any essential element to "cost-sharing must be an adequate system of financial assistance to ensure access for needy students" (p. 27).

Means testing was therefore advanced to ensure that families with genuine limited incomes can access higher education, while student awards based on student performance are considered to encourage academic excellence. It is believed that the provision of these grants and awards supplement or constitute the students' resources needed to access and graduate from higher education programmes. Evidence from the use of means testing systems, however, suggests that a fair and equitable approach is needed to ensure that awards and grants are issued to eligible students, (Marcucci and Johnstone 2010, p. 1)

Any alternative model must be cognizant of the fact that there are students who because of their socio-economic status provision must be made for them to realize their potential and therefore access must factor in any decision making about the financing of tertiary education. Like the traditional model, the primary goal of the alternative model should be the social and economic development of the citizens of Barbados.

In the next chapter, I will state the implications of the findings for policy and practice, the theoretical literature and future research priorities.

CHAPTER 5 CONCLUSIONS AND IMPLICATIONS

5.1 Introduction

In this chapter I will discuss the changes which have occurred in the funding of higher education in Barbados post-September 2014. I will also examine the implications of the findings for the policy and practice. The implications of the findings for theoretical literature will also be examined. As with any study, the limitations will be explored and finally, any future research priorities will be stated.

To understand the impact of this policy change, two research questions framed this study:

- 1. What are the perceptions of policymakers, University Administrators, informed specialists, senior public administrators, students and parents on financing tertiary education at the University of the West Indies, Barbados?
- 2. What do the majority of participants' view as the best options for financing tertiary education at the University of the West Indies, Cave Hill, Barbados?

This research sought to document the perceptions of the various categories of stakeholders, on the government's decision to introduce direct fees on university students. Firstly, the views of students and their parents who were directly impacted by the decision were canvassed. Next, the perceptions of university administrators who were indirectly affected by the imposition of the fees on students were sought. I thought it prudent to canvass the views of informed specialists in the area of higher education whose comparative local and international perspectives and wealth of experience would help to illuminate the matter. Additionally, the research documented the views of stakeholders in education on the strengths and weaknesses of free tertiary education which was employed prior to September 2014 and their perceptions on the introduction of a fee-paying structure for students at the university level. Finally, all participants were asked to propose alternative models of financing a university education.

5.2 Changes to the Higher Education Policy since 2014

In April 2015, in order to address the concerns raised relative to the tuition fees, the Ministry of Finance provided the Ministry of Education, Science, Technology and Innovation with five million dollars for financial support to students who met specific criteria. The grants were for undergraduate students studying at the Campuses of the University of the West Indies who were Barbadian and were undergraduate students. Grants were awarded for Full Tuition and Partial Tuition. In order to qualify for a Full Tuition Grant, the students Annual Household Income of BDS \$25,000 or less or BDS \$2,100 or less monthly (for one person studying full time at UWI). In order to access the Partial Tuition Grant, the students Annual, Household Income should be between BDS \$ 25,001-\$35,000 or BDS\$2,100-\$3,000 monthly for one person studying part-time at UWI; or BDS \$45,000 per annum or BDS \$3,750 monthly. The value of the partial grant was 30% or 50% of the annual cost of the course of study.

Table 10: Full and Partial Tuition Fee Grants

FACULTY	FULL TUITION (BDS)	PARTIAL TUITION
		(BDS)
Medicine	\$10,000.00	\$5,000.00
Law	\$8,808.00	\$ 4,404.00
Social Science	\$5,625.00	\$2,812.50
Humanities & Education	\$5,625.00	\$2,812.50
Science & Technology	\$5,625.00	\$2,812.50

Source: Tertiary Section, Ministry of Education, Technological and Vocational Training 2018

Additionally, loans were provided by the Student Revolving Loan Fund without sureties or security. These loans were to be repaid monthly when the graduate starts to work. The Student Revolving Loan Scheme (SRLS) offers loans to citizens of Barbados, at least eighteen (18) years of age, enrolled or accepted for enrolment in an accredited programme offered by an accredited educational institution and pursuing or

proposing to pursue a full-time, part-time or Distance course of study approved by the Committee.

In May 2018 a new political directorate formed the government of Barbados. During the election campaign, The Barbados Labour Party, one of the Opposition Party pledged that "from September 2018, a BLP Government will pay tuition fees for Barbadians to attend The University of the West Indies" (B.L. P. Manifesto 2018, p. 10). This pledge was fulfilled on June 24th 2018 when the Minister of Education, Technological and Vocation Training delivered a Ministerial Statement in Parliament reversing the September 2014 policy. In that speech, the Minister also stated that "full-time students must 'give back' 150 hours of community service per year and part-time students 100 hours." (Bradshaw 2018, p. 5).

5.3 Implications of the Findings for Theoretical Literature

An examination of the literature on financing tertiary education provided me with a global perspective on the approaches being used to address this very complex phenomenon. What is clear is that the governments have recognized "that with the ascent of the knowledge-based economy and the value placed on higher education as an engine of economic growth and development additional investment in this sector is needed" (Johnstone, 2009, p. 1). The findings reinforced the concept of social justice and human capital theory. The participants believed that this fee-paying structure had a negative impact on access, resulting in several withdrawals by individuals who could not afford even 20% of the cost. This impact was also reported to negatively influence the operations of the University as several students were unable to continue or commence particular courses of study. The Campus registrar reported that there has been a 45% decline in the registration in postgraduate students, which can have a further effect for the "future socio-economic development of Barbados given that some courses in the Social Studies Faculty were developed in collaboration with the public and private sector" (Caribbean Media Corporation 2014 in Jamaica Observer September 14, 2014, p. 1). A survey conducted by the UWI Cave Hill Campus in 2018, revealed that the worst affected by the introduction of the tuition fees were working mothers in their middle to the late thirties (Barbados Today, 2018).

Additionally, the rising cost of higher education, coupled with the competing needs from primary and secondary education and public health, and the limited ability to increase tax revenue have placed governments under tremendous pressure (Johnstone, 2009; Marcucci, 2013). Consequently, some governments have experimented with various funding models. In this regard, the literature provided insights into student funding policies that involved the division of higher education costs between government and students and their families. Other models offered financial assistance that allowed students from the lower socio-economic background to ensure that they are able to access higher education.

The literature that was examined is replete with examples of financing tuition fees through the use of income-contingent loans. Barr (2008) and Barr et al (2017) state "that income-contingent repayments improve efficiency by protecting borrowers and lenders from the uncertainty of a loan that is not protected by physical collateral" (p. 33). Additionally, according to Barr (2010) "with an income-contingent loan, graduates pay while students get it free" (p. 28). It is my belief that this model of financing the tuition fee policy is one that should be considered by the government and if the Student Revolving Loan Fund is recapitalized, consideration can be given to the income-contingent model of financing the tuition fees. This model would see students accessing cheap funding for their Tertiary Education to pay tuition fees and other living expenses upfront. The servicing of the loan payment will be after graduation when the graduate starts to work (Barr, 2008).

In comparison, the tertiary institution administrators and the organisations' administrators recommended the mixed model of financing. This model would necessitate the sharing of the cost between the student, the parent, government and private organisations. Johnstone (1986, p. 202) first proposed this model of financing and states that

all higher education systems were financed by four sources: the taxpayers or government, funding the public institutions and some student financial assistance; the parents who finance portions of their children's higher education expenses from current income, savings, or future income via borrowing; the students who finance their share from savings, summer

earnings, term-time earnings and future earnings via a variety of governmental and private loans; and donors or philanthropists, including individuals, corporations and foundations financing certain higher education expenditures through either endowments or current giving.

The recommendation from the participants delineates that government should pay 80%, the private sector 15% and the student or parent 5%. It is my belief that one of the necessary conditions or benefits for this model to be successful is greater financing options for students to improve ease of access. As stated by Woodhall (2007, p. 27), "an essential element to cost-sharing must be an adequate system of financial assistance to ensure access for needy students".

As was expected, there was much discussion on the proposed policy shift that introduced direct user charges on all university students. The news media, politicians, church leaders, parents, students and members of the public entered the debate, making suggestions about the impact of the new policy of tuition fees and what other options the government should explore to finance tertiary education at the university.

Universal free education has been at the forefront of the transformation of the Barbadian economy and society. Therefore, the introduction of tuition fees was a significant shift in financing education. The Campus Registrar stated that 1,468 students registered for the academic year 2014 as compared with 2,240 for the academic year 2013 a reduction of 34.5% (Walters, 2014).

Professor Harris claimed that It allowed the child of the agriculture worker to attend the University and to sit in the same class as the child of the manager (Personal Communication January 29, 2015). Thus, the social benefits of education and private benefits were realised as a result of the human capital investment (Riddell, 2005).

Responses to the question on the current funding model where students were asked to pay tuition fees, elicited a response which stated that the imposition of 20% of the cost of tertiary education was seen as a barrier to access since September 2014. Almendarez (2016, p. 1), Robert (1991, p. 480), & Beckles (2012, p. 15) all posit "that education is an investment in human capital that has the outcome of

transforming the social and economic status of a country". Therefore, the imposition of fees can be seen as a barrier. However, Marcucci (2013) opines that governments can use a number of different policy tools to help needy students cover their tuition fees, which include grants, scholarships and vouchers. Therefore, the government in 2015 introduced the higher education grant and the unsecured loans from the Student Revolving Fund.

5.3.1 The implication of the findings for policy and practice

The impact was also seen to influence the long-term socio-economic development of individuals and the country as a whole. The inability of persons to access tertiary education which would enhance their prospects for employment would also threaten their earning power in middle to upper paying occupations. Tewarie (2010, p. 244) and Psacharopoulos (1986, p. 1) "advance that sustainability requires predictable government funding, private sector involvement, public-private partnerships, commercialization in higher educational institutions and leveraging regional and international partnerships". I concur that a sustainable tertiary education system is a necessity for Barbados so that its citizens can participate and benefit from the global knowledge economy. Therefore, there is a need for the government to continue to support tertiary education. Earlier in the study, I spoke to the fact that Barbados has not experienced the "brain drain" phenomenon like most countries; however, in my opinion, it is quite possible that students will seek to find alternative models of accessing tertiary education.

Responses to the benefits of the current model of financing tertiary education acknowledged the need for change to the financing of tertiary education. Participants all acknowledged that the public policy shift for tertiary education financing in September 2014 was inevitable as there were continued costs increases associated with larger student enrolment and increased costs of tuition. Marcucci (2013) posits that growing enrolment, reduced government investment and prevailing economic recession have led to policies of charging tuition fees. It is important to note that there was the significant emphasis given to the financial burden placed on the state to sustain the financing of tertiary education as a result of the fully-funded model. Changes to the funding model were deemed inevitable. The model in which

government partially funded costs to the UWI for its students was anticipated to reduce annual expenditure by 24% or 40 million dollars (Sinckler, 2013).

While the participants perceived that there were benefits associated with the traditional model of free higher education, they also held some critical views. These included the financial burden placed on the state and the un-sustainability of the model because of demand and the government's declining revenue. Tewarie (2011) argues, that "it is an unsustainable proposition that government direct subsidies can continue to support a growing population of tertiary students indefinitely" (p. 7).

Johnstone (2004b, pp. 403-410) advocates "that tuition fees should only be implemented after a regime of financing options have been developed to include, student loans, grants and scholarships". Additionally, these financing options should be buttressed by a system of means and needs testing which would be tied to family needs or ability to pay. With these measures in place, the perceived weaknesses of the traditional model should be mitigated. However, Munene and Otieno (2008, pp. 471-477) note "that these schemes have not been successful because of the selection process and corruptive practices such as grants being awarded on a 'who you know basis'".

Moore, (2006), advanced that if government sponsor individuals based on labour market demands, care must be taken that this policy does not lead to an oversupply of graduates. Further, Moore (2006) opines that the University might produce more graduates in a particular field but the demand might not accommodate all of the graduates. To alleviate this (Moore 2006, p. 36) suggests "that information should be provided to potential students on the potential job market after they graduate to encourage more students to pursue careers in areas that are in high demand". However, the areas selected might not be areas of interest to the students and, therefore, there could be a decline in student enrolment which could further impede the socio-economic development of Barbados.

Financing Tertiary Education in Barbados: The Impact of Two Funding Models on Four Key Factors of Tertiary Education (Table 11) is a summary of the responses by the participants in the study on Tertiary Education Financing. The table summarises

the major findings emanating from the interviews. As can be seen, when tertiary education is financed fully by the state, there are little or no issues with access to education. However, when government expenditure increases, the prospects for socio-economic development are enhanced. As stated, the expansion of the tertiary education sector is stifled. According to Barr (2008, p. 44), "a central element in widening participation in higher education is the strengthening of pre-university education from nursery to secondary". In Barbados, the compulsory school age is from five years to sixteen and, therefore, students who enter the University attain the entry qualification necessary to access higher education are permitted to do so. If more funds are invested in the early childhood system and primary years, the foundation would be strengthened; thereby, creating access for more persons because they would have the basic qualifications (Barr, 2008).

Conversely, when tertiary education is partially funded, access is reduced for the most venerable of the population, government funding is reduced, the prospects for the development of socio-economic development are limited; however, the expansion of tertiary education sector is impacted positively.

Any alternative model must take full cognizant of the fact that there are students who because of their socio-economic status cannot access tertiary education unless provision is made for them to do so. Therefore, issues of access must be factored into any decision about the financing of tertiary education. Although de Gayardon (2017), advances that "free-tuition higher education is not only expensive but also does not guarantee improving access or success in the future" (p. 12), in Barbados, this is not the reality. I agree that it is expensive, but it has guaranteed access, success and the development of the Barbadian Human Capital.

With regard to the new funding model, some benefits were perceived. These included a reduction of expenditure on Tertiary Education, greater resource and allocation efficiency, contribution by more stakeholders, increased student responsibility for facilitating and ensuring success, and the expansion of technical and vocational areas. It must be noted that as the traditional model, the primary goal of the alternative model is the social and economic development of the citizens of Barbados.

Table 11: Financing Tertiary Education in Barbados: The Impact of Two Funding Models on Four Key Factors of Tertiary Education

TERTIARY	ACCESS	GOVERNMENT	SOCIO-	EXPANSION
EDUCATION		EXPENDITURE	ECONOMIC	OF TERTIARY
FINANCING			DEVELOPMENT	EDUCATION
				SECTOR
FULLY STATE- FUNDED	1			
PARTIALLY FUNDED	1		-	

5.4 Limitations of the study

The following limitations of the study should be noted:

- 1. The major limitation of my study was the issue of scheduling the interviews for the participants in the study. Challenges were especially experienced with the administrators from the tertiary institution and the student focus groups. Finding the correct time and location proved problematic. In order to address these problems, discussions were held with the participants to draw a suitable and convenient time for the interviews.
- 2. The study is a case study in that it investigated the Cave Hill Campus of the University of the West Indies (UWI). As a result of the small sample size; the results though conclusive, cannot be generalized to the entire population. However, the findings can be applied or transferred to a similar setting (Gay, Mills & Arasian, 2009). According to Lincoln and Guba (1985) "it is, in summary, not the naturalist's task to provide an index of transferability, it is his or her responsibility to provide database that makes transferability judgements possible on the part of potential appliers" (p. 316).

5.5 Further Research Priorities

The data emanating from this research points to the need to evaluate the current funding model of financing tertiary education at the UWI (Cave Hill Campus). The research has found that the introduction of tuition fees has resulted in the majority of students who are in the vulnerable population being denied access because of the inability to pay the fees. Marcucci & Johnstone (2007, p. 1) posit "that the policies by which tuition fees are established are critical because of the impact on higher education accessibility and the implications to equity and social justice".

I, therefore, make the following suggestions to address the challenges which have identified in the study fully cognisant of the fact that no one policy can be adopted to address the challenges:

- 1. The Higher Education Fund should be a full grant and not divided into a full and partial grant.
- 2. The structure of the means test that is used to allocate the higher education grant should be revised to accommodate this change.
- 3. The loans provided by the Student Revolving Loan Scheme should be converted into 'Income-Contingent Loans'.
- 4. The suggestion of the mixed model of financing which involves contributions by the student, the parents, government and the private sector should be explored.
- 5. There should be a policy of sustainable financing for tertiary education, in light of the tight fiscal space within which the government is operating.
- 6. As this study was done with a small sample of stakeholders, I recommend that a research survey needs to be conducted into the perceptions of Barbadians on the funding of tertiary education using a larger sample size.

As Chief Education Officer, I have researched and documented the effects this change has had on the access to tertiary education at the university level based on the responses of the stakeholders, ever conscious that investment in education is the vehicle to build the human capital which is necessary for national development (Riddell, 2006). My role is that of implementing policy; however, having analysed the responses from the interviews, and examined the documents from the Ministry of Education, Technology and Vocational Training (METVT) and UWI, I am convinced that it is my duty to share the results of the study with the policymakers, in an effort to influence a policy change that would mitigate against the existing challenge of access.

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APPENDIX I



Downloaded:27/04/2019Approved:15/09/2014

Karen Best

Registration number: 110273703

School of Education

Programme: Doctor of Education(EdD)Caribbean Programme

Dear Karen

PROJECT TITLE: Gauging Consumer Perceptions on Policy Shifts in

Education at the University of the West Indies

APPLICATION: Reference Number001547

On behalf of the University ethics reviewers who reviewed your project, I am pleased to inform you that on 15/09/2014 the above-named project was **approved** on ethics grounds, on the basis that you will adhere to the following documentation that you submitted for ethics review:

University research ethics application form 001547 (dated29/08/2014). Participant information sheet 002620 version 1 (28/08/2014).

Participant consent form 002049 version 1 (14/07/2014).

If during the course of the project, you need to documentation please inform me since written approval will be required.

Yours sincerely

David Hyatt

Ethics Administrator

School of Education

APPENDIX II

INTERVIEW QUESTIONS

- 1. How is university education financed in Barbados currently?
- 2. What are your views on the current model of financing university education?
- 3. What are the strengths of the current model of financing university education?
- 4. What are the weaknesses of the current model of financing university?
- 5. How has the current model of financing university education contributed to the economic development of the country?
- 6. How has the current model of financing university education contributed to the social development of the country?
- 7. How has the current model of financing university education contributed to the political development of the country?
- 8. What are your views on the new model being proposed by the Barbados government to have students pay fees for university education?
- 9. What alternative model would you suggest for financing university education in Barbados?
- 10. Why do you suggest this model?
- 11. Have you always felt this way about financing university education?
- 12. If no, then what has caused you to change your perceptions?
- 13. What do you think would be the ramifications of the model that you are proposing?
- 14. What do you think could be done to militate against such ramifications?
- 15. How does Barbados stand to benefit from the model that you are proposing?

Participant Information Sheet

TOPIC:

Gauging Stakeholders Perceptions on Policy Shifts in Education at the University of the West Indies.

'You are being invited to part in a research project. Before you decide, it is important for you to understand why the research is done and what it will involve. Please take time to read the following information carefully and discuss it others if you wish. Query anything that is not clear and indicate whether or not you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.'

The research study is being conducted for the requirement of the EdD thesis at the University of Sheffield. The findings will be published in the EdD thesis portal at the University of Sheffield.

Purpose of the study

The government has proposed significant shifts in financing education policy with the introduction of direct fees for university students from September 2014.

This research seeks to gain insights into the perspectives of the various categories of stakeholders involved in university education in Barbados. It will begin with the students who are the direct beneficiaries and will extend to their parents, policy makers and senior university administrators whose clientele are the most affected by any changes in policy regarding the funding of university education. Additionally, the research will survey the perceptions of informed specialists whose comparative international perspective and wealth of experience might help shed light on the matter. Finally, based on the data emerging from the study, the research will make proposals on alternative financing models for the university education sub-sector in the country.

Duration of the study:

The data will be collected during the next four months.

What is required of me?

If you consent to participate in the study you will be interviewed. This interview should not last more than an hour, however it might be necessary to follow up the interview with a telephone call.

Will my participation in the study be confidential?

All information obtained will be held in the strictest confidence. In order to achieve this, all names and recordings will be kept in the strictest of confidence. Pseudonyms will be used to preserve anonymity of some participants. Those participants like the Minister of Education and the Parliamentary Secretary whose identity cannot be anonymous then the following statement will be in their participants' sheet: Interviews will be recorded and transcribed and you will be asked to review the interview transcripts to ensure that these provide a faithful and acceptable record of the discussion that took place. 'Should you wish to withdraw parts of what was said in the interview these will be deleted from the transcripts.

Will I be recorded and how will the recorded media be used?

The audio recordings of your activities made during this research will be used only for data analysis purposes. I will be the only person with access to the recordings and no other use will be made of them. After the interviews have been transcribed the recordings of the interviews will be destroyed.

What happens after I have taken part?

After completing my thesis, if you desire to have a copy of the study, it can be sent to you. The Doctoral Thesis will be shared with the Minister of Education, Science, Technology and Innovation, the Permanent Secretary and the Principal of the University of the West Indies, Cave Hill Campus.

Who has reviewed the project?

The research proposal has undergone ethical review by the School of Education, University of Sheffield.

What if I have a complaint?

Please contact me in the first instance to discuss any concerns you may have. If you feel that your concern has not been addressed appropriately, my supervisor will be at your disposal to discuss the matter. Her contact details are:

Dr VassilikiPapatsiba at v.papatsiba@sheffield.co.uk.

If you feel that the issue has not been handled to your satisfaction you may contact the University of Sheffield's Registrar and Secretary on 0044 114 222 1100 and registrar@sheffield.ac.uk.

Karen Best

APPENDIX IV

Participant's Consent Form

Title of Research Project: Gauging Stakeholders Perceptions On Policy Shifts In Educa The University Of The West Indies	ation At
Name of Researcher: Karen Best	
Participant Identification Number for this project: Please initial box	
I confirm that I have read andunderstoodthe information sheet dated 2014-07-11, explaining the above research project and I have had the opportunity to ask questions about the project.	
I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline. Contact Number of researcher: 246-430-27	740
I understand that my responses will be anonymised before analysis. I give permission for members of the research team to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the report or reports that result from the research.	
I agree that my responses can be recorded. I also agree that after the data is analysed the recording will be destroyed.	
5. I agree for the data collected from me to be used in future research	
6. I agree to take part in the above research project.	

Name of Participant	Date	Signature
(or legal representative)		
Name of person taking consent	Date	Signature
(if different from lead researcher)		Ç
To be signed and dated in presence	e of the participant	
Lead Researcher	Date	Signature
To be signed and dated in presence	e of the participant	_

APPENDIX V

UNIQUE IDENTIFIERS FOR PARTICIPANTS

Identifier

TIA 1a - Dr. Fields
TIA1b - Dr. Lynch
TIA 1c - Mr. Kent

TIA 1d - Professor Harris

TIA IS - Dr. Manning

Policy Maker 1 Mr. Cave

Policy Maker 2 Mr. Richards
Org. Admin 2a. Mr. Haynes
Org. Admin 2b. Ms. Seale

PFG Jane
PFG Marcia
PFG Sheila

SFG2 Mrs. Smith

SFG2 Keith
SFG2 Karen
SFG1 Liam
SFG 1 Jasmine
SFG1 Andrew