West Indies Group of University Teachers (WIGUT),
St. Augustine

Sustainable Funding of Higher Education in Challenging Times:

Papers Presented at a Professional Development Seminar
Organized by the West Indies Group of University Teachers (WIGUT),
St. Augustine, Trinidad and Tobago, 4 March 2010

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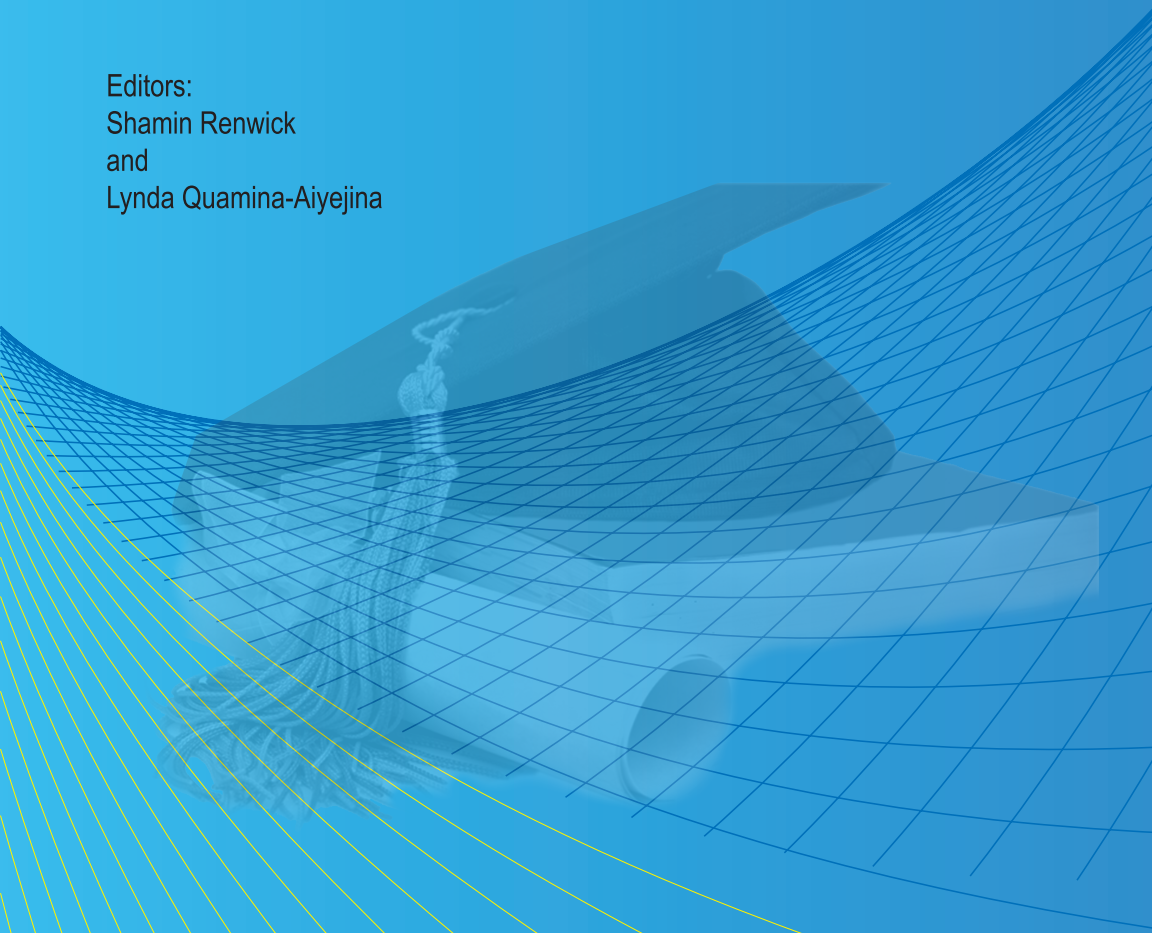

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FOREWORD

Tertiary level institutions in the Caribbean are not insulated from the global economic challenges that have plagued all major economies over the last decade. In fact, the economies of Small Island Developing States have been impacted severely as a result of a much lower tourist trade and depressed energy prices. Conscious of the need to ensure sustainability in tertiary education, the West Indies Group of University Teachers (WIGUT), St. Augustine thought it appropriate to initiate discussions on innovative strategies for long-term funding of Caribbean tertiary level institutions. To this end, a one-day seminar entitled "Sustainable Funding of Higher Education in Challenging Times" was planned and hosted at the St. Augustine Campus of The University of the West Indies (UWI).

The seminar addressed several major issues, including funding models in higher education, traditional and entrepreneurial approaches and models in sourcing funds for higher education, quality assurance and return on investment, education for free or fee, and cost-cutting and workload policies. Presenters and participants from various local and regional institutions attended. The discussions at the seminar were of a very high quality and well received by attendees.

As a result of very positive responses over several months after the workshop, WIGUT was encouraged to make the proceedings of the seminar available to the wider tertiary level education community. This publication represents the culmination of hard work and effort from members of the WIGUT executive committee to complete the onerous tasks involved in preparing a manuscript of this nature. We at WIGUT are proud to provide this compilation and hope that it will give the insights needed by stakeholders in finding appropriate mechanisms to ensure that tertiary education continues to be sustainably funded.

Bheshem Ramlal
Vice President (2009–2010)
WIGUT

PREFACE

The presentations at the WIGUT professional development seminar entitled "Sustainable Funding of Higher Education in Challenging Times" on 4 March 2010 were timely and found to be stimulating and innovative by the attendees. The WIGUT St. Augustine executive committee decided that it would be useful to publish the papers and abstracts to more widely disseminate the ideas and possible solutions proffered by presenters, which continue to be relevant in the continued challenging financial circumstances of most higher education institutions today.

The Seminar programme provides a thorough overview of the day's proceedings (see Appendix). However, subsequently, not all presenters provided papers for inclusion in these edited proceedings. As a result, this document contains both papers and abstracts. A list of contributors and brief biodata is included at the end of the document.

We would like to thank all the persons who presented and moderated at the Seminar, and are especially grateful to those who submitted papers/abstracts for inclusion in this document. The WIGUT St. Augustine Executive Committee (2009–2010) members are commended for their insightfulness in recognizing the need for the discussion on this topic. Their names are listed here to give credit to those who came together as a team, contributing equally and enthusiastically, in making the Seminar a successful and rewarding endeavour.

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Funding Models and Case Applications in Higher Education

Funding Tertiary Level Education in T&T: An Assessment of the Merits of a Graduate Tax

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Abstract

The tertiary level education (TLE) environment in T&T is facing the twin pressures of rising demand and fiscal constraints amidst declining prices of its main export items, namely, crude oil and natural gas. The amount of funding to support TLE services is significantly large. In most developing nations the only realistic way of meeting TLE costs is via a degree of funding that exceeds the allocation provided from the state revenues. One such mechanism is the student loan. Student loans of any sort are called deferred payment plans, which include income contingent loans (ICLs) and graduate taxes alongside other conventional forms of lending. This paper assesses the possibility of alternative models of providing funding for some of the costs associated with TLE in T&T, having regard to the decline in government revenues.

This paper is designed to raise awareness and to promote a discussion on approaches to funding tertiary level education (TLE) in Trinidad and Tobago (T&T). The T&T economy has been providing assistance to its tertiary level education enrolled students since 2001. However, the economy has now found itself in a compromised position as the price and production of its main export product, crude oil, has fallen in recent times. Table 1 shows the trends in some of the basic macroeconomic fundamentals of the T&T economy, from the first quarter of 2005 to the third quarter of 2009.

Observe that back-to-back quarter-to-quarter negative growth rates were only realized in the economy between the last quarter of 2008 and the first quarter of 2009, to the extent that the Government of T&T (GOTT) announced that the economy was in a recession. Since 2008, growth in the petroleum sector, the flagship of the T&T economy, has been volatile and has contracted in five of the quarters since the first quarter of 2008. The non-petroleum sector also fared badly, contracting in the second quarter of 2008, and having zero growth in the last quarter of 2008. In the first quarter of 2009, the non-petroleum sector contracted sharply by 9%, with marginal negative growth also taking place in the very next period. Unemployment levels and the unemployment rates have distinctly started to increase. In the last quarter of 2008, the level of unemployment was 24,600 with an associated rate of unemployment of 3.9%; however, by the third quarter of 2009 this had increased to 35,900 with an associated unemployment rate of 5.8%. Much of this adverse trend in the T&T economy was precipitated by a decline in the price of crude oil from US$123.95 in the second quarter of 2008 to US$42.91 in the first quarter of 2009. Most significant is the downward trend in the production of crude oil from T&T, from 144,100 barrels per day in 1991 to 113,387 barrels per day in 2009. Although natural gas and associated products are now major contributors of hard-earned foreign exchange, oil is in many respects still the benchmark indicator for macroeconomic income.

Table 1. Trinidad and Tobago Macroeconomic Variables, 1st Quarter 2005 – 3rd Quarter 2009

Date	Real GDP Growth – Non-Petroleum Sector - 2000=100	Real GDP Growth–- Petroleum Sector - 2000=100	Real GDP Growth - Total - 2000=100	Unemployment (000's)	Unemployment Rate (%)	Total Exports (US$M)	Oil Price (US$)
Mar-05	-1.23	2.73	3.21	56.3	9.0	2,019.70	49.73
Jun-05	1.38	0.24	1.44	49.3	8.0	2,329.90	53.05
Sep-05	2.89	-4.76	-2.24	50.6	8.2	2,415.60	63.19
Dec-05	0.2	12.21	3.39	42.7	6.7	2,897.90	60.00
Mar-06	0.05	7.77	6.18	42.7	6.8	2,504.30	63.27
Jun-06	3.08	3.53	2.31	45.1	7.2	3,045.90	70.41
Sep-06	2.92	1.00	2.19	36.8	5.9	3,344.40	70.42
Dec-06	0.77	-2.39	-2.56	31.6	5.0	3,205.60	59.98
Mar-07	2.9	2.48	4.49	40.3	6.5	3,024.20	58.08
Jun-07	-4.15	-0.41	-0.96	37.0	6.0	2,571.20	64.97
Sep-07	2.91	1.53	0.16	32.6	5.2	3,271.40	75.46
Dec-07	5.02	2.22	2.57	28.3	4.5	4,524.50	90.75
Mar-08	0.42	-3.48	0.89	32.6	5.3	3,314.30	97.94
Jun-08	-2.17	-1.75	-0.68	28.6	4.6	5,150.20	123.95
Sep-08	2.93	4.52	1.36	29.9	4.7	5,926.60	118.05
Dec-08	0.0	-3.44	-2.59	24.9	3.9	4,295.30	58.35
Mar-09	-9.0	-0.34	-2.86	31.8	5.0	4,120.80	42.91
Jun-09	-0.12	1.54	1.11	31.8	5.1	1,595.10	59.44
Sep-09	2.49	-1.57	-1.35	35.9	5.8	1,509.70	68.20

Source: World Development Indicators 2009

While the T&T economy may have been able to sustain the downturn in oil prices, with better longer-term planning in the context of the Hartwick rule,[1] it made significant errors. For example, a simple rule of thumb for economic planning is that budgetary expenses be sustainable. This has not happened in the T&T case, for in every year since 1990, as shown in Table 2, there has

1 The Hartwick rule states that consumption levels can remain constant or even increase alongside declining natural resource stocks if the rents from these resources are invested into reproducible capital (Hartwick, 1977).

been Sustainable Budget Index scores above unity.[2] Even more, since 2001, adjusted savings have been consistently negative.[3] All of this has transpired in an economy where oil rents have been very buoyant.

Table 2. Sustainable Budget Index for T&T 1990 – 2008

Years	Sustainable Budget Index (GS/ NOGR)
1990	1.69
1991	1.51
1992	1.47
1993	1.32
1994	1.27
1995	1.32
1996	1.41
1997	1.24
1998	1.18
1999	1.38
2000	1.34
2001	1.3
2002	1.26
2003	1.44
2004	1.42
2005	1.39
2006	1.52
2007	1.5
2008	1.33

Source: Computed from Central Bank of Trinidad and Tobago

Altogether, the change in the state of health of the economic affairs in the T&T economy points to the need for policy makers to revisit the whole issue of how to fund TLE. The T&T economy will not be alone in its decision-making challenge as the USA, Canada, and most of Europe are now engaging in similar type of discussions.

2 The SBI is the ratio of government spending to government (non mineral) revenue. The rationale behind the construction of such an index is that sustainable development, especially in economies which are dependent on non-renewable resources, requires that resource rents be reinvested in other reproducible assets in order to offset depletion of the natural capital stock. The index serves as a monitor for the government and other policy makers as to whether mineral rents are being reinvested. A SBI value less than unity implies that resource rents are being reinvested, whilst a value in excess of unity implies that resource wealth is being liquidated for current consumption, a practice that is unsustainable in the long run.

3 The World Bank publishes adjusted net savings as a measure of genuine savings. The World Bank (1997) has defined genuine savings as "the value of the net change in the whole range of assets that are important for development: produced assets, natural resources, environmental quality, human resources, and foreign assets" (p. 21).

Should the State Fund TLE?

The debate as to who should fund TLE is not new. Due to the nature of tertiary education, its allocation can be determined via the market, that is, through the mechanisms of supply and demand, as illustrated in Figure 1. Specifically in Figure 1, D_1 depicts the private demand curve of educational consumers. This demand exists as individuals would be willing to pay for education due to the understanding that higher expected future earnings arise from an enhanced level of individual skills. Profit-maximizing tertiary institutions operate along supply curve S_1, resulting in a market clearing equilibrium price at P_e with a quantity of education services consumed at Q_e. It is well known, however, that Q_e would be below the socially efficient amount of education required because of both distributional and market failure arguments. Prominent among the latter are externalities, which in the case of education spillover benefits are conferred on society, which are not incorporated into the market price of the product. That is, the private consumer of TLE cannot charge compensation for the social benefits his/her education provides.

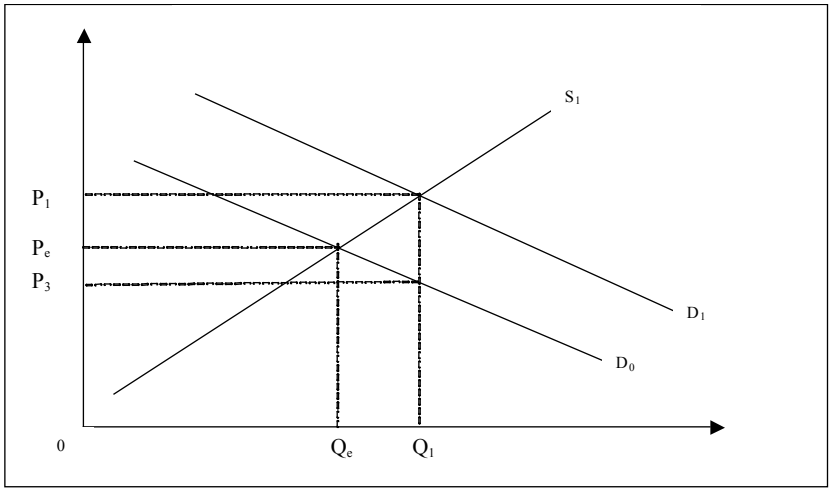


Figure 1. The market for tertiary level education.

Thus, at the margin, social benefits are likely to be higher than private benefits. Given this argument, society's demand curve for education (inclusive of both private and social benefits) is shown as D_1 and the efficient amount of education consumed by society as a whole is at Q_1. Students should pay P_3, institutions receive P_1, and the government covers the difference ($P_1 - P_3$).

Disregarding the obstacles in measuring social benefits, the model's policy recommendation is to subsidize the consumers of education by the amount that would shift D_0 outward to coincide with D_1, so as to achieve the socially efficient level of TLE. This analysis stops short of endorsing free tertiary level education, given that the consumer enjoys private benefits from consumption, which implies that payment is required from both student and government. The social returns/benefits of TLE are not trivial and are dependent on the percentage of the population that has benefitted from TLE. A greater stock of tertiary level graduates, according to Earle (2010), enhances productivity levels in an economy. Earle goes on to suggest that increases in productivity accrue when the increased skills and knowledge gained from tertiary education are combined with capital, technology, and other forms of knowledge-based investments such as research and development (R&D).

TLE encourages the recipient to participate in developmental roles, both nationally and regionally. For example, and from a regional perspective, holders of degrees from tertiary institutions have greater mobility in CARICOM member states. There is also a clear inverse relationship between the amount of tertiary level graduates in an economy and the extent of reliance on the state. Higher levels of tertiary education may help to generate a greater element of social cohesion and complement the crime reduction process. Specifically, the World Bank (2002) notes that:

> tertiary education, through its role in empowering domestic constituencies, building institutions, and nurturing favorable regulatory frameworks and governance structures, is vital to a country's efforts to increase social capital and to promote social cohesion, which is proving to be an important determinant of economic growth and development. (Executive Summary, p. x)

TLE is an embodiment of a merit good, and the private benefit derived revolves around the general fact that TLE graduates receive higher salaries, obtain more secure employment, and generate higher levels of savings. Socially, these graduates can afford, for themselves and their families, an improved quality of life, and possess an improved stock of knowledge and heightened analytical skills, which enable them to make better decisions. Female graduates, in particular, tend to lead healthier lifestyles and enjoy a higher standard of living. Monden, van Lenthe, De Graaf, and Kraaykamp (2003) note that "moreover, educational attainment is more than a financial or economic resource..., higher education is associated with a healthier lifestyle, health knowledge and less risk behaviour" (p. 1902).

The benefits to TLE graduates may even be more pronounced in an economy in which the extent of skill-biased technological change (SBTC) is significant (Piva, Santarelli, & Vivarelli, 2003). Building on this type of reasoning, the *Economist* in 1992 noted that defending government expenditure on universities is theoretically unsound as higher social classes usually dominate the graduate pool and the above-average income grouping.

TLE varies from that of primary and secondary school education in two important ways. Firstly, the students that pursue TLE are adults and assume responsibility for their learning to a greater extent than those attending primary and secondary schools. Secondly, a greater degree of diversity is expected at the tertiary level so that a common curriculum is neither possible nor desirable. The financing of a university or tertiary institution is an expensive undertaking and even the governments of first world economies are beginning to show signs of concern. In a recessionary environment one could expect that governments may first appropriate resources towards primary and secondary school students.

Social rates of return value a society's investment in terms of enhancement of an individual's productive capacity. The Inter-American Development Bank (1999) records that for the Latin American region, in relation to one who has not attended school, someone with 6 years schooling earns 50% more, someone with 12 years of schooling earns 120% more, and someone with over 17 years schooling earns in excess of 200% as much as the unschooled individual. Note that the private rates of return for students in the listed cases are much higher than the society's rates of return, providing support for the position that TLE offers more private than public gains.
Particularly, the Enterprise, Transport and Lifelong Learning Research Programme (Scottish Executive, 2005) notes that:

> not all countries have a distinct system for higher education and further education. New Zealand, Canada and the USA have a joint system of funding for higher education

> and further education. In both higher education and further education, cost sharing is becoming the rule rather than an exception. Most countries seek to include a contribution from all those who benefit from education and do not fund tertiary education solely from taxes. The total level of spending on tertiary education is higher in countries that do not fund tertiary education solely through taxes. Consequently, these countries can support higher numbers of students and the potential for higher participation in tertiary education. (p. 2)

Funding TLE in T&T

Figure 2, drawn from Nkrumah-Young (2010), shows the decision tree regarding the financing of TLE. In cost-sharing arrangements, payments can either be upfront or based on deferral payment schemes. Deferred payment schemes include the income contingent loans (ICLs) or graduate taxation. ICLs, as discussed by Barr (2004), Chapman (2006), and Johnstone (2004), are practised in New Zealand and Australia. This paper focuses on graduate taxes.

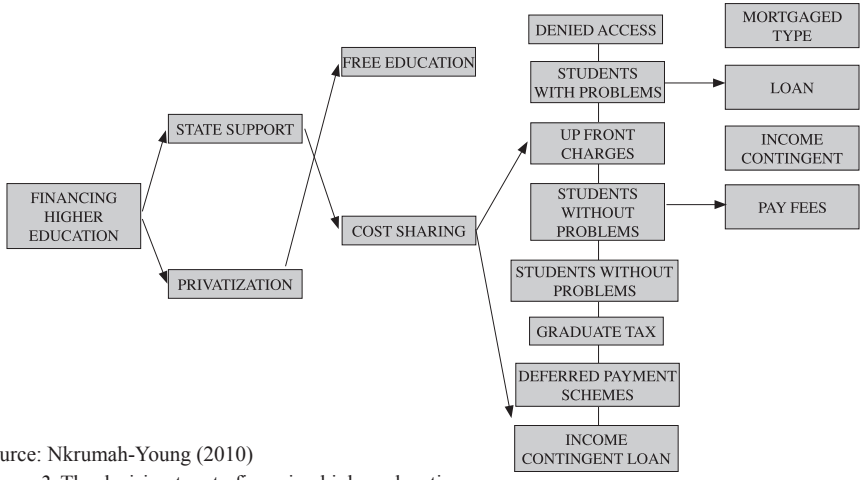
For T&T, in the wake of the first recession in the 1980s, the GOTT introduced the Student CESS Act in 1989. The CESS was basically a 10% charge on the economic cost of attending university. Loans were available from the commercial banks on behalf of the GOTT, under the usual requirements, for any students wishing to attend university but who lacked the tuition.

In the era after 1994, and especially after 1998, the economic environment surrounding the T&T economy was quite favourable, resulting in buoyant economic growth rates.[4] As such, the GOTT made several modifications to the funding of TLE. One of these, the Dollar for Dollar initiative (DfD), introduced in 2001, represented a lump sum subsidy paid by the GOTT to local students enrolled in TLE at selected institutions in the country. According to various unpublished documents of the Ministry of Science, Technology and Tertiary Education, DfD was available to students applying for enrolment at any of the following institutions:

1) The three campuses of The University of the West Indies (UWI)
2) The UWI/Institute of Business and the Institute of International Relations
3) The National Energy Skills Centre
4) Trinidad and Tobago Institute of Technology[5]
5) Cipriani College of Labour and Co-operative Studies
6) All of the campuses of the College of Science, Technology and Applied Arts of Trinidad and Tobago (COSTATT)
7) Trinidad and Tobago Hospitality and Tourism Institute

4 Particularly in the period 1998 to 2009 the average growth rate per annum was estimated at 7.5%.

5 Later this became the University of Trinidad and Tobago.



Source: Nkrumah-Young (2010)

Figure 2. The decision tree to financing higher education.

Students applying for the DfD facility had 50% of their tuition fees covered by the state, with the main objective, aside from reduction in the costs of TLE to the average household, being to increase TLE enrolment by 20% (World Bank, 2002).

In 2004, the GOTT introduced the Government Assistance for Tertiary Education (GATE) programme, which not only guaranteed 50% of tuition fees but also, through a means testing approach, offered additional funding up to a maximum of full financial assistance for tuition fees to deserving applicants. Benefitting from a massive economic windfall resulting from a significant increase in oil and gas revenue, the GOTT introduced in 2006 a modified version of the GATE programme (hereafter oil windfall GATE), which financed the full cost of TLE for all students. Qualification for the oil windfall GATE required registration in an approved programme at an accredited institution, having met the stipulated requirement for rate of progress in that programme. The objective of this initiative was to extend the tertiary participation rate to 60% over a 10-year period.

With the DfD, GATE, and oil windfall GATE programmes, the graduate was required to work in T&T for three years irrespective of the level of tertiary level funding received. Given that effective enforcement of this requirement was lacking, some of these students flouted the regulations and migrated.

In 2006, the GOTT introduced the Higher Education Loan Programme (HELP), which funds undergraduate students in their various programmes. The HELP programme provides a six-month grace period during which the GOTT pays the interest for the student and complements the oil windfall GATE programme, as it provides resources for personal expenses such as accommodation, food, books, and transportation.

This paper challenges the policy issue of free education via oil windfall GATE at the tertiary level from the perspective of an economy under the resource curse, that is, the combination of economic and political challenges that afflict economies characterized by resource booms.[6]

6 The resource curse explains the political economy impact of a resource on an economy (Djankov et al., 2008, Moore et al., 2007, Stijins, 2006, Tierney, 2008).

Figure 3 shows the long-term prospective impact of the oil windfall GATE programme. Technically, the oil windfall GATE programme represents a lump sum income subsidy in the form of an increase in the expenditure of the GOTT to facilitate the consumption of TLE. With the lump sum spending by the GOTT, the macroeconomic aggregate demand curve shifts rightwards from AD_0 to AD_1.[7] Because the investment is for the enhanced utilization of TLE it has the capacity to switch the long-run and short-run aggregate supply curves to the right. Over time, the policy intervention should enhance the real level of macroeconomic activity from Y_0 to Y_1, although the effect on the price level in the economy is ambiguous. From this perspective the oil windfall GATE is very well intentioned; however, it is vertically very inefficient.

To illustrate the vertical inefficiency aspect of oil windfall GATE, we make reference to Figure 4. In this figure**,** the poorest household with a student meeting matriculation standards has an income of Y_p whilst the richest household has an income of Y_r. If university fees can be numerated to $\$Y_1$ per month, then the H_1th household is the household at the margin of being able to pay university fees. From this perspective, the shaded area λ represents the least amount of resources required for the entire block of needy households in the interval H_1 to H_p to meet their fee obligations. However, because oil windfall GATE is universal and all students get full funding, there is an extra block of resources, $\$\alpha$, that is thrown into the TLE funding arena, which could be otherwise utilized.

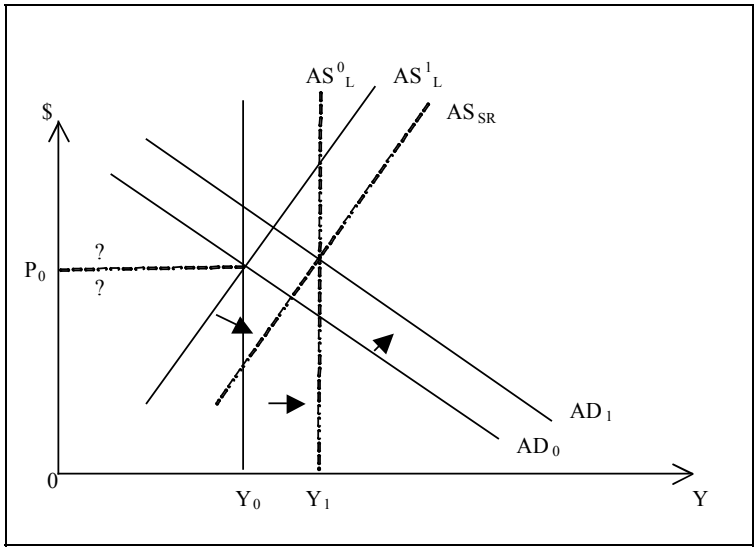


Figure 3. Intended policy influence of GATE.

With universal funding all households receive like treatment, and whilst funding equivalent to area λ would have created horizontal equity in terms of affordable access to TLE, lump sum funding equivalent to $\alpha + \lambda$ results in a vertically inefficient use of funds. Technically, in the opinion of this paper the area α is a manifestation of the resource curse problem at work.

7 The GATE modified programme started in 2006 however, when the unemployment rate was 7.8%, hence the presumption in the diagram that the economy was initially at full employment.

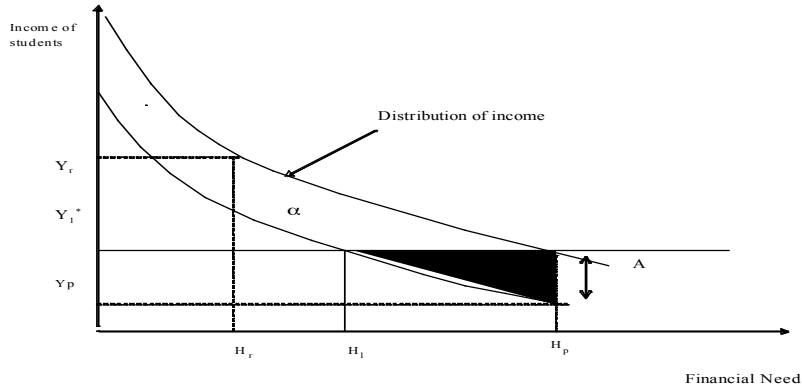


Figure 4. Vertical and horizontal equity impact of GATE.
Source: Hosein, Franklin, & Tewarie (2005)

Amidst this type of wastage by the GOTT in the context of the ongoing recession, this paper elaborates on an alternative free-at-the-point-of-consumption strategy—a graduate tax that can be considered.

The Economics of Graduate Taxation

The logic behind a graduate tax is that of a deferred fee. It involves a special tax so that students can cover part of the cost of their higher education. The concept driving graduate taxation is that the student receives a grant in the form of a waiver of tuition fees for the duration of study. The grant is repaid after the student graduates, and is based on options of payment premised on a predetermined rate or at a modified length of time and the rate of repayment. A graduate tax can take a variety of forms but should typically include: a supplementary tax that is charged to graduates with tertiary level education only, a threshold level of income below which the tax is not charged to graduates, well-defined criteria outlining the duration of the tax, and the breadth of coverage inclusive of maintenance taxes.

Some economists, such as Johnes (1993), Oosterbeek (1998), and Barr (2001), consider graduation taxation to be a tactic leading to superior equity outcomes by ensuring that both low- and high-income students begin from a common point. Graduate taxes are also favoured as the incurrence of a loan, and hence a debt, is psychologically deterring to some students, whereas with a graduate tax system such a dilemma is avoided. One advantage of a graduate tax regime is that both rich and poor students have to repay the loan after they have graduated, unlike with a loan scheme in which only the poorer students would need to take the loan and therefore only the poor students would have to pay.

The extent to which graduate taxes are favourable is dependent upon the ability to capture payments from users of the tertiary education system. Also, the structure of the repayment arrangement for a graduate tax infers that the student does not pay during the period of study but after graduation, with the repayments influenced by the ability of the student to pay. Additionally, given that a graduate tax is based on the income of the graduate it has a low demand on administrative time and can also generate an important source of long-term funds.

The downside to this model is that policy makers need to understand that from a student's perspective, as long as fees are incurred by them, the strategy is considered to be negative. Another disadvantage of a graduate tax is that there is no guarantee that the TLE system would receive the designated revenues, and an appropriate channel may have to be established to ensure that the revenues collected are received by the tertiary level institution. Significantly, though, the graduate tax does not distinguish between poor and rich students and, theoretically, poor students should be treated better than rich students (an issue of social justice). Additionally, students with high lifetime earnings incur a higher real effective rate than required, resulting in repayment at a premium of the tuition waivered for their course of study. Vandenberghe and Debande (2005) point out that the existence of a graduate tax will not necessarily rank TLE higher than other social sector priorities, and because the tax is on students who choose the route of a TLE, it means that students who don't follow this route are exempted from this tax.

Proposed Structure of a Graduate Tax

Let the initial tax charged by the government on a pre-university (first degree) student be t_0. Based on an income level Y_0 (assume that Y_0 is some threshold minimum) the government collects,

$$R_0 = t_0 Y_0 \qquad (1)$$

If a student's salary with tertiary level education progresses from Y_0 to Y_1 where,

$$Y_1 = Y_0 + \Delta Y_0 \qquad (2)$$

and her tax rate increases to t_1 where,

$$t_1 = t_0 + \Delta t_0 \qquad (3)$$

The tax revenues after graduating for the student becomes,

$$R_1 = t_1 Y_1$$

And the change in tax revenues is thus:

$$\Delta R = t_1 Y_1 - t_0 Y_0 \qquad (4)$$

The graduate tax is not focused on Y_0, but on any increment to Y_0. Under normal situations, the economic returns those students make would be taxed at the normal rate (t_0). With a graduate tax a higher tax rate ($t_i - t_0$) is applied to the increment in income ($Y_1 - Y_0$).

Substituting (2) and (3) into (4) yields:

$$\Delta R = (t_0+\Delta t_0)(Y_0+\Delta Y_0)-t_0 Y_0$$

$$\Delta R = t_0 Y_0 + t_0 \Delta Y_0+\Delta t_0 Y_0+\Delta t_0 \Delta Y_0-t_0 Y_0$$

$$\Delta R = t_0 \Delta Y_0+\Delta t_0 Y_0+\Delta t_0 \Delta Y_0$$

These various aspects of the change in government revenues on account of the graduate tax may be represented as:

$t_0 \Delta Y_0$: incremental revenue based on the initial tax rate being kept constant

$\Delta t_0 Y_0$: incremental revenue based on the initial income level of the graduate being kept constant

$\Delta t_0 \Delta Y_0$: incremental revenue based on the increment in the tax rate and the increment in graduate income

In the actual design of a graduate tax, consideration would have to be given to the Y_i of such a nature such that ($Y_i - Y_0$) is sufficiently large so as to warrant a migration of the tax from t_0 to t_1. There would also need to be a clear delineation of the time period over which the grant is to be repaid via the graduate tax.

Conclusion

This paper has assessed the potential contribution of a graduate tax as a prospective intervention to help with the funding crises of TLE, given the contraction in the T&T economy. A graduate tax allows students to contribute to their TLE, which is consistent with the notion of TLE as a merit good. Further, such a tax has the capacity to generate significant amounts of long-term revenue, which could help to provide an additional pool of resources to ease TLE funding. Notwithstanding these advantages, consideration must be given to the issue of the repayment time; will the student have to repay for the rest of his/her working life or until the loan is repaid?

As TLE expands, tertiary institutions need to invest resources on distance education, information and communication technology (ICT), and enhanced teaching and learning strategies. Accordingly, the tax rate for the graduate tax must not be set myopically but rather in such a manner that it caters for the increased costs which accompany the expansion of the educational system.

Given the high propensity to migrate from the Caribbean, the issue of benefiting students migrating to developed countries remains and must be addressed by the government. A related issue is the relevance of TLE to the developmental needs of the particular economy. TLE funding must be directed to defined areas of study that most benefit the growth and development in the economy. Accordingly, the need for government to maintain and publish a national skills inventory and the corresponding human resource gaps remain critical, even with the adoption of the graduate tax.

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Reforming the Financing of Higher Education: Implications for Caribbean Administrators

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Abstract

This paper examines the philosophical underpinnings of the call for reforming the financing of higher education from the perspective of higher education administrators, politicians, and students. It argues that there are three underpinnings associated with the call: the entrepreneurial thrust, the financing, and the resource allocation underpinnings. Experiences of some universities are used to identify challenges that Caribbean higher education institutions are faced with in their quest to reform. Actions that may be taken to combat the challenges are suggested.

Plenary - Summary of Discussions

- Consider where we want to position ourselves given the need for innovative means of funding in a sustainable manner
- Relationship between macroeconomic systems and funding schemes
- Some funding models more friendly than others given their policy content and impact on students' funding
- All funding options have significant costs and benefits
- We should aim to minimize costs and maximize benefits
- TEI must be proactive in lobbying for change

Traditional and Entrepreneurial Approaches and Models in Higher Education

A Model for Entrepreneurialism in Universities

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Abstract

For most higher education institutions, there is now increasing competition with other sectors of the economy for government funding, and the resultant drop in state funding is now driving universities to intensify their search for non-state funding. UWI has responded to the need for entrepreneurialism as seen in its Strategic Plan 2007-2012, which calls for "the mobilization of adequate funding to pursue the developmental path … (p. 40). At UWI, Business Development Offices (BDOs) were implemented at the three main campuses with the general mandate to raise funds. At the St. Augustine Campus, the BDO is focused on identification and development of revenue-generating opportunities and has implemented a number of strategies that resulted in income of over TT$80m. Within this context, and recognizing that institutional fundraising requires that key staff across the institution possess the knowledge, skills, and abilities to engage in entrepreneurial activities, the BDO at St. Augustine submitted a proposal to the European Union entitled "Capacity Building for the Financial Sustainability of ACP Higher Education Institutions."

Traditional Universities in Context

According to Hanna (2000), traditional universities have a bureaucratic structure with specific academic and administrative roles, and are governed independently without political or business interference. Hanna goes on to say that in traditional universities worldwide, the basic assumptions and characteristics of traditional universities were developed, refined, and implemented during the 20th century and, in general, have not been seriously challenged.

Wilms and Zell (2003) describe traditional universities as stately organizations that are not structured to chase opportunities like fast-moving organizations. They note that these organizations are buttressed by traditions of academic freedom, and that administrators and academics are caught between opposing forces which both demand change and at the same time resist it.

Peter Drucker claims that "Thirty years from now the big universities will be relics" (Lenzner & Johnson, 1997 p. 7) and will not survive if they resist change. Yet, in most instances, university decision-making bodies are not prepared to be flexible and nimble, and to adopt processes that are necessary to sustain such institutions in a challenging global environment. Efforts at radical change have generally not had positive results as this entails altering values, beliefs, habits, myths, and rituals, which, according to Schein (1992) are rarely abandoned wholesale.

Wheeler (2000) observes that in a traditional university, it is a well-known maxim that academic staff are employed not for what they can do, but what they know. He goes on to say, however, that "the collective knowledge base of specialists and experts is the true resource and most valuable asset of any educational establishment." Rowley (2000), too, notes that universities have a significant level of knowledge management activities, and that it is important to recognize these and use them as foundations for further development.

The Challenge of HEIs in the 21st Century

For most higher education institutions, as it is with The University of the West Indies (UWI), there is now increasing competition for government funding with other sectors of the economies of the region. The current economic downturn has led to falls in the tax base and cuts in public expenditure. The prospect of a long-lasting reversal of the growth has already resulted in significant cuts in higher education budgets and is now driving universities to intensify their search for non-state funding. At the St. Augustine Campus, the shortfall in the budget for 2008/2009 was 12%, or approximately TT$63,000,000.

Diversification of Income Streams — The UK Scenario

During the 1980s all UK universities faced a need to diversify their income. The University of Warwick, founded in 1965, adopted an "earned income" approach, which included retailing on the campus, the development of a conference trade during vacation and in term time, the introduction of self-financing master's programmes plus short courses/executive training programmes for industry and other external customers, and the introduction of charging policies that reflected market or above market price.

UWI's Response to Entrepreneurialism

According to the UWI Strategic Plan 2007-2012, "the mobilization of adequate funding to pursue the developmental path…. is essential to the successful transformation and positioning of UWI to continue to contribute to national and regional growth, development and competitiveness in a 21st century context" (p. 40). Two key enablers, among others, are identified for advancing UWI's strategic themes: (a) Funding the Enterprise and (b) Transforming the Leadership and Administrative Culture and Processes.

At UWI, Business Development Offices (BDOs) were implemented at the three main campuses with the general mandate to raise funds. At the St. Augustine Campus, the BDO is focused on identification and development of revenue-generating opportunities through (a) business development, (b) the creation and strengthening of the culture of grantsmanship, (c) philanthropy, (d) commercialization, (e) recognizing and leveraging intellectual property potential, and (f) consulting activities.

As with UK universities, in particular Warwick University, similar initiatives are being undertaken at the St. Augustine Campus. For example, self-financing degree programmes and executive training programmes have been developed and implemented for external customers, and steps are being taken to bring income from commercial activities in line with market prices. In addition, a number of research projects and consultancies have been undertaken to expand the income stream. The following are selected examples of the BDO's successes:

- Bachelor's and Master's Programmes in partnership and for specific clients (TT$25m)
- Executive Training Programmes
- Regional Public Goods (RPG) – Non-Communicable Disease Surveillance System grant from the Inter-American Development Bank (IDB) (TT$4.9m)
- EMA Projects: Trinidad and Tobago National Communication on Climate Change, Development of a Water Resource Management Plan for Nariva (TT$1.7m)
- Ministry of Local Government – Rural Development (TT$1.1m)
- Guyana – Baseline Survey (TT$1m)
- Funding in Plant Biodiversity (Edulink) (TT$4M)

Resource Mobilization as an Agent of Change

Within this context, and recognizing that institutional fundraising requires that key staff across the institution possess the knowledge, skills, and abilities to engage in entrepreneurial activities, the BDO at St. Augustine submitted a proposal to the EDULINK Programme entitled "Capacity Building for the Financial Sustainability of ACP Higher Education Institutions." The EDULINK Programme, financed by the European Union (EU) and implemented by the ACP Secretariat, funds cooperative projects between HEIs in the African, Caribbean and Pacific (ACP) Group of States and the 15 EU Member States that are signatories to the 9th European Development Fund.

The proposal was made for the development of a professional development programme in resource mobilization in partnership with a number of universities, namely, University of Technology, Jamaica; University of Mauritius; University of Suriname; University of Guyana; University of Belize; The University of the South Pacific; and the University of Warwick.

This project entails strengthening the capacity of the member universities in the area of sustainability, through the design and implementation of a professional development programme on resource mobilization. With a major objective being to be internationally competitive by creating a highly skilled workforce and a strong research capacity, the programme will equip senior managers with the information and tools to enable them to support and promote entrepreneurialism in ACP universities, and to identify and recognize the key factors necessary for successful resource mobilization.

Specific programme outputs include:

1. Academic and administrative staff of all campuses of UWI and partner universities trained in revenue-generation techniques in the following areas: *philanthropy, grantsmanship, commercialization of research, and business development*.
2. Proposals for funding generated by each partner institution.

The overall benefit of the programme is to build capacity of academic and administrative staff in departments and faculties to undertake revenue generation successfully.

Phase I of the programme has been completed, and Phase II was expected to be ready for implementation at all campuses of UWI and partner institutions by August 2010.

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Plenary - Summary of Discussions

- There is a call to move from traditional to entrepreneurial approaches
- UWI has begun the entrepreneurial journey
- Entrepreneurial strategies must be developed and effectively communicated
- Culture systems should be adaptive to support this venture
- Consider government's role in making participation in the university's entrepreneurial ventures appealing
- Concern that research students aren't being sufficiently supported

Quality Assurance and Return on Investment

Justifying Investments in Quality Assurance in Higher Education

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Abstract

Quality assurance can be expensive, requires the time and commitment of highly-skilled individuals, and necessitates significant administrative support and coordination. The benefits of quality assurance can be difficult to quantify or distinguish from the regular goals already identified by institutions. This paper examines the human capital development approach to justifying investments in quality assurance mechanisms as critical concerns among policy makers. It argues that quality assurance systems must be seen as leading to quality outputs and processes in terms of "fitness for purpose," and that such initiatives must also be seen as having long-term and genuine efforts towards improvement; not simply temporary systems set up to meet the minimum standards of external regulators. Higher education institutions in the Caribbean, and in many small island developing states, face an increasingly globalized environment where quality is critical in maintaining international recognition and competitive advantage. Growing competition from cross-border education, distance learning, and "borderless" education poses a significant threat to the sustainability of local and regional institutions that must be able to produce internationally competitive programmes.

Rapid growth in enrolments during the past decade, the proliferation of private provision of higher education, demands for greater accountability, and complaints from employers concerning the "skill-gap" of higher education graduates have combined to raise serious concerns about the quality of higher education in the region. It is becoming increasingly apparent that the "massification" of higher education can erode the confidence in the quality of higher education graduates, undermining the benefits of investments in higher education. In order to stem the decline in the perceived quality of higher education, effective quality assurance and quality improvement need to be implemented at the institutional and national level. In response, institutions and governments have had to put in place various forms of quality assurance to reverse the decline in quality and to regulate the new providers.

Development Needs and Investments in Higher Education

There is significant evidence that human capital development is strongly related to achieving and sustaining economic growth. Many developing countries have tried to capitalize on this principle through important national policy statements and significant investments in expansion of education at all levels. Developed countries, too, have been keen to ensure their competitive advantage by ensuring continued commitment to the funding of educational growth and expansion.

Many countries have also realized that investments in higher education are especially important to remaining competitive in a globalized world, characterized by increasingly complex production and distribution processes. The theory, supported by economic data, is that investing in higher education leads to significant increases in productivity, which leads to overall increases in

economic productivity through growth in gross domestic product (GDP). Increased productivity also tends to be in "high-end" industries, which bring even greater returns. A highly skilled workforce is associated with greater levels of consumption, increases in the government's tax base, and lower levels of unemployment.

In the "knowledge society," value is added to products and services through innovation and specialized skills obtained through increasingly higher levels of educational attainment. "Knowledge workers" are required across all sectors, and impact on practically all occupations and professions, including health care workers, tourism workers, teachers, and even farmers. Since knowledge is potentially available to everyone, investments in education (higher education in particular) can potentially transform countries over a short period of time. For countries with limited or diminishing natural resources, like Trinidad and Tobago, investment in higher education has been posited as the only sure way to prepare for the future.

There is also growing evidence which indicates that investments in higher education are associated with a number of non-economic benefits, including better health and well-being, social stability, and civic responsibility. Higher education is now considered important in ensuring the collective future of societies and nations, with a number of societal benefits that cannot be quantified.

Quality Challenges in the Developing World

Based on these principles and assumptions, a number of developing countries have invested heavily in measures to increase the supply of higher education and higher education graduates over the past two decades. The Government of Trinidad and Tobago has focused on increasing enrolment in higher education while maintaining equality of opportunity through widening access. The strategy has been to support both public and private sector institutions, mainly through tuition waivers and access to student loans. There have also been increases in government scholarships to attend local institutions, as well as for study in specialized areas at "top" foreign institutions.

Rapid growth in enrolments during the past decade, the proliferation of private provision of higher education, demands for greater accountability, and complaints from employers concerning the "skill gap" of higher education graduates have combined to raise serious concerns about the quality of higher education. It is becoming increasingly apparent that the "massification" of higher education can erode confidence in the quality of higher education graduates, thus undermining the benefits of investments in higher education. In order to stem the decline in the perceived quality of higher education, effective quality assurance and improvement needs to be implemented at the institutional and national level.

Several factors can potentially lead to the decline in the quality of higher education. These include lower per unit costs to produce a graduate, insufficient numbers of qualified academic staff in higher education institutions (possibly magnified by brain drain, retirements, or migration due to fear of crime), low internal and external efficiency, and poor governance. Added to this, the rapid growth of private providers, foreign programmes, and distance learning in response to the increasing demand for higher education has raised questions about the integrity of higher education investments. In response, institutions and governments have had to put in place various forms of quality assurance to reverse the decline in quality and to regulate the new providers.

Challenges of Implementing Quality Assurance Systems

The need for effective quality assurance mechanisms is becoming a priority of many national strategies for higher education. Throughout Latin America and the Caribbean, Asia, Africa, and Europe, national accrediting bodies and regional quality assurance initiatives are being established to ensure that institutions maintain minimum quality standards. It is becoming increasingly the norm that higher education standards are based on international best practice, and that regional quality assurance associations/bodies play a role in coordinating the activities and capacity building of national quality assurance agencies.

At the institutional level, increasing demand for accountability by governments, employers, and the public, as well as the growing need to compete on a national and international level, has led to growing emphasis on investing in quality assurance mechanisms and quality audits. Institutions have come to realize the importance of self-assessment as part of the quality assurance process. Self-assessment promotes a "culture of quality" within the institution and units involved. Self-assessment also facilitates teamwork among staff and helps institutions to identify their strengths and weaknesses.

Similar constraints and challenges face both institutions and national agencies in implementing effective systems for quality assurance. Insufficient numbers of adequately trained and credible professional staff to manage quality assurance processes is a significant challenge, particularly for newly established quality assurance agencies. Inadequate numbers of academic staff at higher education institutions with knowledge and experience in conducting self-evaluations can significantly limit the depth of self-assessments by institutions preparing for external evaluation. This is particularly the case as institutions, especially private institutions, move towards a greater reliance on part-time and adjunct staff. National quality agencies also depend on a limited supply of senior academic staff and professionals to act as external evaluators at institutional and programme reviews. There is an obvious strain on senior academics as they are asked to support both their own internal quality assurance systems as well as the national agencies.

Justifying Investments in Quality Assurance

Quality assurance can be expensive, requires the time and commitment of highly skilled individuals, and necessitates significant administrative support and coordination. The benefits of quality assurance can be difficult to quantify or separate from the regular goals of what the institution is supposed to achieve. Justifying investments in quality assurance mechanisms at higher education institutions is about demonstrating the value added through such investments. Quality assurance systems must be seen as leading to quality outputs and processes in terms of *fitness for purpose.* Quality assurance initiatives must also be seen as long-term and genuine efforts towards improvement, not simply temporary systems set up to meet the minimum standards of external regulators.

To be effective, quality assurance initiatives must harness the support of staff at various levels of the institution; from the gardener and cleaner to administrative and academic staff (many of whom are likely to disagree on vital issues). To be effective, the benefits of investments in quality assurance must also be clearly communicated to and supported by a broad range of stakeholders.

A successful quality assurance system must be linked to the achievement of the learning outcomes (knowledge, skills, and competence achieved at the end of the learning process) that fulfil key

stakeholders' expectations, including students, parents, employers, and the public in general. In terms of students' interests, quality assurance systems must lead to student-centred teaching and learning processes, as well as innovative and flexible learning programmes that meet their expectations and lead to professional development and increased employability. Quality higher education produces graduates who can enter the workforce ready to add value. Quality higher education should also satisfy employers' demands for skilled professionals who possess core skills and knowledge, as well as the inclination to seek further professional development.

Quality assurance also leads to greater public confidence in institutions. The requirements of quality assurance reporting and documentation can lead to greater confidence in the transparency and accountability of higher education institutions, particularly publicly funded institutions. Greater public confidence in higher education institutions goes a long way in justifying further investment.

In an increasingly globalized world, quality assurance is critical in maintaining international recognition and competitive advantage. Faced with growing competition from cross-border education and distance learning programmes accessible to students around the world, "borderless" education can pose a significant threat to local institutions that are unable to produce internationally competitive programmes.

At the national level, countries that fail to develop high-quality, internationally recognized institutions have significant difficulties in attracting foreign investment. Multinational corporations unable to find local talent in the countries in which they operate are likely to bring their own professionals and seek particularly exploitative economic relationships.

Funding Higher Education through Exporting Higher Education

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Abstract

Regional governments of the Anglophone Caribbean have invested heavily in UWI and other tertiary level institutions. In the case of UWI, the value of this investment is evident in physical infrastructure, human resource base, intellectual capacity, increased student throughput, and rich contribution to the region. UWI is known internationally and, in these challenging times, must be seen as being a product for reinvestment in the international higher education (HE) market. UWI's maturing academic quality assurance system and move towards institutional accreditation position the institution to begin to take advantage of HE export opportunities. Traditional importers of HE have recently begun to export HE. Similarly, the Anglophone Caribbean, also a traditional importer of HE, must learn from exporters and position itself to become an exporter. As the regional university with traditions spanning over 60 years, UWI must play a pivotal role in this project. This undertaking is a long-term one that requires comprehensive planning and rigorous quality assurance.

This paper explores limitations of trade agreements, principles for sharing quality HE across borders, good practice in cross-border HE, models of cross-border HE, and motives for and steps to be taken in exporting HE. The discussion must consider the export model most appropriate to the Anglophone Caribbean; teaching and research programmes for which there is likely to be a market outside of the region; the nature of agreements that must be negotiated with potential importing countries to support the export of Caribbean HE, and the quality assurance indicators that must be rigorously monitored in importing countries.

Introduction

The University of the West Indies (UWI) is one of only two regional universities in the world. This unique regional character represents significant sociocultural value that must be leveraged in the quest for sustainable funding of the enterprise. CARICOM countries have made a huge investment in UWI and rather than allow this to be devalued, it must be enhanced (Beckles, 2005).

The *Final Report of the Task Force on the Liberalisation of Higher Education and its Impact on The UWI and Tertiary Education in the Region* (Beckles, 2005) recommends that UWI leverage its brand by embarking upon regional and international strategies to increase access as well as to increase revenue. While the regional strategies are oriented towards increasing access, the international strategies are aimed at increasing revenue. The Task Force recommends taking steps to internationalize UWI's academic programmes through the following initiatives:

1. Delivering pre-packaged accredited programmes via the Internet to specific target groups internationally.
2. Undertaking articulation agreements (similar to the existing arrangements with local tertiary level institutions (TLIs)) with private, offshore providers.

3. Promoting the campuses individually as heritage sites, thereby exploiting the unique characteristics of UWI as a regional institution, both under "knowledge tourism" and "cultural-tourism" concepts.
4. Fast-tracking the goal contained in the 2002–2007 Strategic Plan of establishing a Centre for Caribbean Studies in a US or UK city with a large West Indian community; perhaps in New York, to begin.

Three of the above strategies require that UWI member states become exporters of higher education, taking advantage of the provisions of the General Agreement on Trade and Services (GATS). The GATS is one of the many agreements adopted by the World Trade Organization (WTO) in 1994. It covers all modes of supply of services: (a) cross-border supply, (b) consumption abroad, (c) commercial presence, and (d) presence of natural persons. The GATS is focused on the business dimension of borderless education, which involves the physical or virtual movement of educators, learners, programmes, and providers from one country to another (Gift, 2003). Several observers (including Barlow, 2001 and Knight, 2002) have questioned the benefits of the GATS for importers of educational services; such importers being principally countries in the South. One of the areas of great concern is that the ultimate purpose of the GATS is to facilitate corporate takeover of public services across the world, including higher education. At the same time, there is a recognition that the GATS offers significant advantages for traditional exporters of higher education services. By embarking upon the strategies indicated above, the member states of UWI would be seeking to capitalize on the benefits to be derived from the GATS, thus joining the ranks of those countries that have traditionally been importers of higher education but that are now becoming exporters of higher education, for example, Malaysia, Singapore, China, and, to a lesser extent, Thailand, India, and Vietnam.

Models of Cross-Border Higher Education and Forms of Export of Higher Education

Two principal approaches in the conduct of cross-border higher education are (a) programmes moving across borders and (b) provider moving across borders.

Programmes moving across borders

Programmes moving across borders entail the movement of individual education/training courses and programmes across national borders through face-to-face or distance learning models, or a combination thereof. "Credits towards a qualification can be awarded by the provider in the sending foreign country or by an affiliated domestic partner or jointly. Franchising, twinning, double/joint degrees and various articulation models are the more popular methods of cross-border programme mobility" (Knight, 2007, p. 137). In programme mobility, a key consideration is *who* awards the course credits or ultimate credential for the programme. Another key question relates to who recognizes the provider and whether or not the programme has been quality assured or accredited by a legitimate body. Of great importance is evidence that the qualification is recognized for employment or further study in the receiving country and in other countries. Should UWI, for example, partner with another institution, there would be questions regarding the ownership of intellectual property rights to course design and materials. Another potentially important question relates to the legal roles and responsibilities of partner institutions regarding academic, administrative, human resource, financial, and assessment matters.

Provider moving across borders

In the case of UWI, moving across borders as a provider would entail moving across a national border, physically or virtually, to establish a presence to offer education/training programmes

and/or services. In considering mobility at the level of programmes or as provider, UWI will have to consider issues of scope and scale of programmes/services offered. Having a local presence in another country requires investment. A physical move means learners being in the same country with UWI as awarding institution. With only UWI programmes moving, learners will be located in a different country from UWI. With UWI moving physically, the institution can award credits and qualifications or have these awarded by an affiliated domestic partner.

The different forms of cross-border provider mobility that the UWI might consider are:

1. Branch campus or Study Centre/Teaching Site. UWI could consider establishing a Study Centre in the USA or the UK to support students taking its courses/programmes. These can be independent UWI centres or be run in collaboration with local providers in the host country for the Centre/Site.
2. Affiliation/Networks: UWI can collaborate through innovative partnerships set up to deliver courses and programmes via distance or face-to-face modes.

In order to export its products successfully, UWI must be able to compete with comparable institutions in the international market place. Consequently, UWI's internal quality assurance must be able to stand up to scrutiny and, certainly, institutional accreditation becomes an imperative. As in the case of Malysia, UWI must consider exporting to those countries that are open to 1+2 or 2+1 arrangements to facilitate students doing one or two years respectively of a degree course in their home country, followed by one or two years respectively in a UWI country. As occurs with the American Carnegie Mellon University (CMU) in Australia, UWI must explore the possibility of negotiating with a local university or government to pay for facilities and non-academic support in order to reduce the quantum of resources at risk in the event things do not work out. UWI will need to take all necessary measures to ensure that its domestic and international reputation is not placed at risk by delivering low-quality programmes in another country or by having to discontinue programmes before all students have completed their studies.

Quality Assurance Implications

Recognition of qualifications

As part of national and regional strategies in support of the export of higher education to raise revenue, member states of CARICOM must move to become signatories to the regional UNESCO Convention on the Recognition of Qualifications.

Registration in receiving countries

UWI may need to be also registered, licensed, or recognized in the receiving country. There are often bilateral agreements to facilitate and monitor the presence of foreign education providers. However, now that education services are part of bilateral and multilateral trade agreements, new regulations and questions become relevant.

Quality indicators to be satisfied

Many of the quality indicators to be satisfied by UWI as a provider of cross-border education are consistent with those expected in its domestic market. These include "local relevance, accountability and fairness in terms of access" (Egron-Polak, 2007, p. 130). In addition, various checklists and international codes for good practice in cross-border higher education provide a quality assurance framework for cross-border educational activity. Elements of this framework intended to assist institutions with self-monitoring are: (a) contribution to the broader public

good, (b) capacity building, (c) relevance, (d) accessibility, (e) quality, (f) accountability, (g) transparency, and (h) commitment to high-quality higher education across borders (Egron-Polak, p. 131).

The Way Forward

The pursuit of the opportunities made possible under the GATS requires close and ongoing communication and collaboration among key national and regional governmental and higher education agencies and institutions. UWI contributing countries submitting "offers for the liberalization of the Services sector must avail themselves of the technical assistance provided by the [Caribbean Regional Negotiating Machinery] CRNM as well as by the University of the West Indies" (Beckles, 2005, p. 6), not only to ensure that reasonable safeguards and exemptions protect the viability of the regional university, but also to ensure that CARICOM countries have access to the traditional exporting countries for the export of their own higher education products. Planning for such exports must be explicit and comprehensive. UWI must sell what it has and what other countries want. It must identify the nature of student demand and increase its capabilities in these areas to address the demand. As a region we must set out to learn from the traditional exporters. Planning, licensing, and quality assurance bodies must work with UWI for the quality assurance of this investment.

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Plenary - Summary of Discussions

- Investing in higher education facilitates economic and social growth
- HE investment is particularly salient for counties with limited natural resources
- This region can become an exporter of higher education
- Certain principles of quality should be espoused:
  - Local relevance
  - Accountability
  - Fairness in terms of access
- To address the disconnect between policies and practice, institutions must have precise output and outcome policies

Education for Free or for Fee?

Fee or Free

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Abstract

Empirical data on the results of free, or more or less free, tertiary education over the last few years clearly indicate that, for the majority, the charging of fees for tertiary education is a significant deterrent. Comparing the period before and after the implementation of the GATE policy, there is a definite increase in the number of students enrolling at tertiary level institutions, public and private. The evidence is incontrovertible; free tertiary education continues to result in significantly more citizens accessing tertiary education. This paper briefly examines some of the advantages and disadvantages of free tertiary education, and identifies some options available to the state for continuing this initiative.

Why should the state continue to fund tertiary education?

1. The societal benefits of having a population of which a significant number have been trained/educated at the tertiary level are immeasurable.
2. The quality of services and products produced is increased.
3. Challenges/issues faced by the society are dealt with in a civil and evolved manner.
4. The self-esteem of the individual is increased, leading to stronger feelings of patriotism and nationalism.
5. Innovation and entrepreneurship increase. In his book "Start-up Nation: The Story of Israel's Economic Miracle," author Saul Singer traced the development of the State of Israel from a backward desert country to first world in less than 60 years. The critical success factors were intellectual development, innovation, and entrepreneurship.
6. The possibility of rapid economic and social development increases. Note the rapid development of the US and UK after World War II, due largely to the many initiatives implemented by the two governments to assist former soldiers to access tertiary education. Less than 5% accessed tertiary education in the late 1940s; with broadening access came rapid development.
7. A better trained workforce is a country's best investment. To quote Benjamin Franklin, "an investment in education pays the best dividends," both for the individual and for the country. Relying on non-replenishable/renewable natural resources is not a viable long-term strategy. Our best option is to use a portion of the revenue from these resources to continue funding free tertiary education.

Possible disadvantages of free tertiary education include:

1. **The administrative challenge.** Ensuring that there are robust, timely, and scalable administrative processes and procedures, both within the individual organizations and between organizations (e.g., with the Ministry of Science, Technology and Tertiary Education and the Accreditation Council of Trinidad and Tobago (ACTT)).
2. **Ensuring that throughput matches enrolment.** Free education can open possibilities to citizens, but it can also expose them to information overload. One result could be persons

pursuing qualifications but not completing programme, either at all or in a timely manner. Lower cost is but one factor to consider when pursuing further education. If students do not properly assess other factors, such as the relevance of the qualification, the necessary sacrifices and lifestyle adjustments, and so on, the rate of completion could slow down.

3. **Cost and sustainability. The international literature indicates that the biggest deterrent to free tertiary education is really cost and sustainability.** Thus the US does not subsidize tertiary education. However, most of the Nordic countries in Europe do, as well as large countries like Brazil. It is probably easier for a country to subsidize tertiary education if it can see benefits in terms of the graduates and research being relevant to the country's needs. Due to its size and private sector resources, the US can leave that alignment to the private sector, where research is largely funded by industry grants. Trinidad and Tobago is not as mature yet nor do we have sufficient resources to leave that initiative purely up to the markets.

How can we sustain our free tertiary education initiative at a time when the world is in recession and when one is unable to predict with any level of certainty what shape tomorrow will take economically, socially, and politically?

Prudent government policies are required if we are to continue with a policy of free tertiary education. Delivering quality tertiary education is expensive. Essential components (human resources, physical infrastructure, IT, libraries, etc.) are costly. This begs the question, "What policies can be formulated to allow the sharing of the cost of providing free tertiary education to the citizens of our country that is both fair and efficient?"

Possible options include:

- Taxation: The public shares the cost of tertiary education across the board; a policy of sharing the burden—individuals and society benefit, hence the burden should be shared.
- Purchase of seats at tertiary level institutions (TLIs) by government, based on income threshold level.
- Loans, paid off by having graduates work in the country.
- Government funds the cost of tuition; however, institutions are allowed to charge the students a nominal fee.

Imperatives for State Funding of Tertiary Education in Developing Countries

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Abstract

Education is funded by the state (i.e., no fees are charged) in virtually all countries at least up to the primary level, and in many countries at the secondary level. Few countries fund tertiary education fully but most do so partially by several means, for example, subsidies, scholarships, and soft loans. Corporations and foundations are also sources of funds and incentive schemes that foster tertiary education. In the USA, tertiary education is fee-based, and though state universities are subsidized some of the most sought-after colleges are private. State funding, and private funding to a large extent, is very much linked to accreditation and a reputation for quality. In Germany, the constitution itself addresses the issues of equality of funding, opportunity, and standards in the 16 states of the Federal Republic. This guarantees a certain measure of consistency throughout the country. Because of the clear link between education and development, developing countries have no choice in the allocation of a substantial portion of resources to education and training, and in the adoption or development of systems of accreditation that are at once internationally recognized and, at the same time, relevant to local conditions. This should be linked to labour market demands, which should not be left to chance and the vagaries of the free market, including the whims of private investors, but should be deliberately configured to national goals of competitive advantage associated with innovation incentives for maximum value added and return on investment of the resources, public and private, allocated to education and training.

Plenary - Summary of Discussions

- GATE may not be sustained indefinitely
- There are clear advantages to state funding for higher education, but there are no free lectures
- Must devise creative mechanisms to ensure return on investments
- Broadened access may result in a reduction in the quality of students
- Quality issues can be tackled with a more robust teaching delivery system
- Issue of open access is not just about fees

Cost-Cutting and Workload Issues

Workload Policies for University Staff in a Time of Financial Challenges

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Abstract

The global financial situation over the last decade or so has forced many governments to re-examine the nature and extent of the funding they provide to higher education. While in some countries leaders are pledging to sustain funding levels, in many other countries governments have significantly reduced the funding to higher education. In addition to a reduction in funding, many countries are moving apace to have many more of their citizens educated at the tertiary level. The challenge for many tertiary level institutions is that they are expected to deliver the same quality of education to greater student populations with less financial resources. These challenges exist in many countries, including Trinidad and Tobago. In response to the challenge of reduced funding many institutions have embarked on different strategies. Some institutions have embarked on generating income through entrepreneurship, alumni support, and internal grants. However, others have opted for implementing cost-cutting measures, including reduction in human resources and revised workload policies. The changing workload policies are likely to significantly impact both administrative and academic staff of most institutions. This paper discusses the nature of the changes of workloads and their potential impacts.

Introduction

The last few years have seen significant changes in the global financial situation, which has forced many countries to re-examine the nature and extent of funding they provide to higher education. Although many leaders have pledged support for higher education (Best, 2010; White House, 2010,), others have had to reduce funding by small amounts (Higher Education Funding Council for England, 2010), while others have had to make more significant cuts (Wardrop, 2010). Although there are varied responses to the financial situation, many tertiary level institutions are paying more attention to issues of productivity and accountability (D. Rampersad, personal communication, 2010). The performance of university staff, especially academic staff, has come under much closer scrutiny as a result. Many universities have developed workload policies to better measure and report on staff performance. With the changes in funding, these policies are being revised. This paper examines some of the changes being made to workload policies and the likely impact this may have on the delivery of higher education, especially in the Caribbean context.

Workload Policies

Workload may be defined as the total effort rendered to the university by a member of staff in instruction, scholarly and creative activity, professional service, and administrative activities (Idaho State University, 2009). The workload policy is normally formulated by an institution to establish the workload of staff members in the entire institution. It is obvious that workload

assignments will affect the commitment of university resources to ensuring that adequate staffing is provided to meet the needs of the institution. A workload policy that focuses on research output and dictates a lower teaching load would obviously have more academic staff members or require graduate students to do more of the teaching than an institution that requires staff members to carry a heavier teaching load. The institution committed to greater research output may have to commit more resources to hiring a greater number of academic staff.

The question may be asked then, "Should the workload policy of a tertiary level institution be driven by available resources alone or should there be other considerations?" This paper examines the issues involved in arriving at an answer to this question. The next section examines the work actually undertaken by academic staff members in most universities. Based on these activities, it is possible to examine the likely impacts of changing the workload of academic staff members. This is discussed in the third section, while the final section provides conclusions.

What do University Academics Do?

While many universities assign workload in terms of the number of courses to be delivered by an academic, the role of academics is much more complex and diverse than assumed by many administrators and policy makers. In addition to teaching, most academics also conduct research; are involved in scholarly activities and service to institution, profession, and community; and undertake professional and other associated activities that are essential to the smooth functioning of the tertiary level institution (Arreola, 2007). A summary of these activities is shown in Table 1.

Table 1. Activities Associated With Academics

Teaching	
• *Instructional Design* Developing course material, online tutorials, and designing strategies for experiential learning events	***Scholarly & Creative Activities*** • *Proficiency* Continuous development through workshops, conferences, educational seminars, and short courses.
• *Instructional Delivery* Delivering lectures, hosting chat room sessions, and facilitating group discussion	• *Discovery* Conducting basic research in your field
• *Instructional Assessment* Developing and grading written examinations	• *Dissemination* The publication of books, monographs, and journal articles; writing reviews and critiques; the presentation of professional/keynote addresses; and delivery of papers, poster sessions
• *Course Management*	
Professional Service Service to institution, profession, and the general community	Conduct of research to produce useable product or service or inventing and patenting a new product based on previous research

(Source: Arreola, 2007)

The actual amount of work associated with each of these activities will vary across and within disciplines, and even with an individual over time, depending on priorities at a particular time in the career path of that individual (see Arreola, 2007 and Paulsen, 2002).

What is Research and Scholarly Activities?

It is necessary to recognize that given the diversity of disciplines and areas of interests that academics pursue at the university level, it is not possible to state all activities that constitute research and scholarly activities. However it may include, but is not limited to: peer reviewed publications, performances, or exhibits, including books, book chapters, journal articles, musical performances, and art exhibitions or performances; peer reviewed entries in reference works or reviews; development of patentable processes, inventions, and other works of intellectual property; major editorial responsibilities or reviewer with a nationally or internationally recognized journal or other publication; major role in conference or scholarly event organization; grant writing and acquisition; professional conference presentations and invited addresses; non-peer-reviewed activities, including musical performances, art exhibitions or performances, reference works, and reviews; student involvement in academic staff scholarship or supervision of student scholarship; work submitted but not yet accepted for publication or showing, and drafts of work in progress with documentation (Collins & Palmer, 2004).

Teaching

Teaching is complex and time-consuming and requires specialized training to ensure competence. Inexperienced teachers, as well as experienced teachers teaching courses for the first time, out of necessity must invest significant time in designing and developing course material and assessment instruments. In addition, teaching itself cannot be sustained without significant scholarly activities by all teachers. This must be done to ensure that the specialized content that teachers are required to deliver is current and accurate. In addition, continuous pedagogical training and study are essential for teachers to maintain their craft. It is therefore a simplification to treat teaching and research as being mutually exclusive (Arreola, 2007; Paulsen, 2002).

Professional Service

Professional service is the means through which academics offer professional skills, advice, and knowledge to their stakeholder communities. It is through professional service that academics communicate to their stakeholders the new knowledge that they generate, which will ensure that societies advance. In addition, academics often serve on governing boards of public agencies, management committees of professional bodies, and as volunteers in non-governmental and charitable organizations. The value of the professional services provided by university academics may be of great significance, especially in small-island developing states such as the Caribbean where the available expertise may be quite limited. The extent to which professional services impact society, and therefore their importance in tasks performed by academics, should not be underestimated.

The Impact of Changing Workload Policies

Changing the workload performed by academic staff may have significant impacts. Most stakeholders are likely to be affected, including the institution itself, the academic staff members, students, and the financiers of the institution. The extent of impact would obviously depend on the changes made to the policy. This section will examine the types of changes that may be made and the y impacts these are likely to have on each of the stakeholders.

Course Load Variation

In times of financial challenges, many institutions may require academic staff members to teach additional courses as a means of reducing expenditure on salaries for teaching staff. While this may allow savings in wages, this action, if not carefully done, may affect the quality of teaching

by staff members who may become overloaded with teaching duties. In addition, less time is available for student consultations since more time must be spent on course development, lecture preparation, and evaluation of additional assignments. Increased teaching loads are most likely to affect academic staff members' ability to dedicate the same amount of time to research and publication, public service, and other activities of interest. However, it is envisaged that not all academics would respond to the additional load in the same manner. Some academics may do just enough to maintain the standards that they had set before, while other academics may rise to the challenge by becoming more efficient and therefore demonstrate overall improvement in the process. Any lowering in the quality of teaching provided by any tertiary level institution may have a negative impact on students, the reputation of the programmes being offered, and the institution itself. Loss of accreditation and even reduced funding may result in the longer term.

Additional Research and Publications

Often in times of financial challenges, universities may require academic staff members to increase their output in research and publications. This may be required in addition to an increase in teaching loads. The assumption is that additional output in research and publications would raise the profile of the institution and therefore attract additional funding and support through research and other grants. While this may be a valid strategy, it is not without consequences. Increased staff effort and time would be needed to deliver more research and publications. This might result in a reduction in the time spent on teaching duties and associated activities, and may affect the quality of teaching delivered to students. In some cases, universities have hired teaching assistants to undertake teaching. While this may provide support to academic staff, the quality of teaching may still suffer.

Fundraising Activities

As financial challenges increase, the need to seek alternative funding becomes more pressing. Many institutions embark on vigorous fundraising campaigns to generate the much-needed funds to sustain the enterprise. Several options for funding are available: alumni; private sector; national, regional, and international sources; as well as commercialization of assets and services of the institution. While some of these activities do not involve changing the workload of academic staff members, other activities may require a significant commitment of time and effort from academics. Should an institution require more effort to be placed on fundraising, the consequences may be either quite positive or quite negative. An examination of the literature suggests that many institutions in North America have had a tradition of fundraising over the last century or more, while British universities have only in the last few decades been encouraged to vigorously pursue funds rather than depend on government funding (Cook & Lasher, 1996; Shattock, 2010).

The impact of increasing the requirement to source alternate funds in an institution not accustomed in doing so may be quite significant on academic staff members, especially if this requires the creation of intellectual property that is marketable. The offering of consulting services and the writing of complex research grant proposals to source regional and international funding are also likely to impact significantly.

The creation of intellectual property in institutions without a culture of innovation is likely to be difficult to achieve in the short term, and will require some investment in training and resources. In addition, the time and effort needed in developing and preparing any innovation for commercialization usually come at the expense of time that may be spent on teaching, public service, and research and publication. Similarly, the offering of consulting services by tertiary

level institutions utilizing academics who are not experienced in the provision of such services may not only take away from the time available for their regular, but may expose the institution to liability and a loss of credibility and respect if the services provided are not up to industry standards. Sourcing international funding is an onerous process, especially for researchers who are not experienced in preparing the complex grant application proposals that are normally required. Normally, training or technical support is needed to support academics in preparing these grant proposals. Often, because of the time and effort needed to prepare a successful application, many researchers opt out of pursuing such funding. A major disincentive is the lack of reward or recognition available to academics who have not received grants, even when the proposals have been very substantive pieces of work.

Conclusion

Institutions are normally tempted to increase workloads, especially teaching loads, when there is a looming financial crisis. While this may yield short-term benefits, the overall long-term impact on the quality and reputation of the institution may be far greater than the savings realized. Employing the other strategies that are available to the institution can be far more beneficial to the institution and to its stakeholders. While these may take more time and effort to achieve, the net result is much more positive and long-term. Institutions may gain much more goodwill and support from their stakeholders if they are seen to be more self-sustaining, nationally and regionally relevant, and internationally competitive. This cannot be achieved by reducing the workforce of the institution but by becoming more entrepreneurial and innovative.

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Options for Cost-Cutting at the UWI

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Abstract

Cutting costs in an environment of increasing workloads is a euphemism for increasing productivity. There is no doubt that the university has achieved its goal. The question is how? To understand this issue, one simply needs to return to simple microeconomic theory and reflect on the optimization problem of maximizing output given a cost constraint. Hence, this is precisely the methodological approach that will be employed to guide the presentation.

Indeed, over the last decade the growth of output from the university has been exponential. The inputs have all increased as well. However, the academic staff has grown mostly because of the use of part-time lecturers. This model has certainly served the university well.

Given the amount of plant built in the last decade, the growth of the non-academic staff would have outstripped that of the academic staff. Hence, an analysis of data with respect to the cost structure of the university will be paramount. We intend to use existing data in support of this argument. A similar type of cost analysis has to be conducted in relation to physical accommodation for students since that matter is critical in the generation of output of students.

Undoubtedly, the issue of cutting costs requires information on the respective weights of costs. It will come as no surprise if the proportion of cost associated with academic staff has declined while students' enrolment has increased dramatically. With adequate data, we intend to show this in the presentation.

All in all, the presentation addresses other pertinent issues in relation to cost and workload against the recognition that the university has pursued an output strategy that emphasizes student enrolment. Therefore, it is not going to be easy to change midstream, especially since the physical plant is now in place.

Plenary - Summary of Discussions

- Are we willing to be more self-reliant and flexible to cut costs?
- Workload policies should not change without consultations
- Staff should feel motivated when grappling with heavy workloads
- This university must contemplate its role in goal development
- UWI is allotted a portion of the national budget for tertiary education
- There is need to ensure an objective, criteria-based means of assessment

Funding the Academy

Sustainable Funding of Higher Education in Challenging Times: The UWI Open Campus Experience

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Abstract

The paper presents higher education as a public good and points to the fact that, for this reason, governments across the world have invested heavily in its growth and expansion. It notes that financing for The University of the West Indies (UWI) in general, and the Open Campus in particular, has come from public funding, tuition fees, investment of assets, fund-raising, and philanthropic giving, and that the mix has changed over time. As a new entity with unique organizational arrangements, the Open Campus has adopted innovative approaches to the formulae used by the three physical campuses for state funding and tuition income. In pursuit of its strategic goal of financial viability, the four threats identified are: small population size and limited resources of supporting states, particularly in the UWI 12; competition for public funds among sectors; the conflict between regional and national imperatives; and the need for the creation of an entrepreneurial culture. In spite of these challenges, the paper posits that, unrestricted by time or space and aided by modern technology, the Open Campus has the potential to achieve financial viability through the development of high-quality, student-friendly, relevant courses and programmes, developed in a timely manner in partnership with other campuses and other institutions, marketed carefully, and delivered to a vast audience across the Caribbean and the world.

Higher education has been an expensive undertaking for several centuries, whether viewed in absolute or relative terms. Compared to primary or secondary education, its highly qualified faculty and staff, the provision of cutting-edge equipment and supplies to support science and technology, and its time-consuming research and high-quality publications set higher education apart as a costly undertaking. Additionally, higher education represents the pinnacle of the education pyramid, where the number of participants is relatively small and thus limits the usual gains of economies of scale. This is very evident in the English-speaking Caribbean where the total population base is under 7,000,000 persons, and where both history and geography conspire against expanded enrolment; the former due to the late establishment of universities in the region and the latter to the reality of our location in and service to mainly separate island states.

Prior to the 1960s, the higher education operation in the region was relatively small, very selective, limited in its range of offerings, and catering to a student body that was fairly homogeneous in its academic background and achievements. Much of the experience was residential, and students read for degrees aided by face-to-face contact with their lecturers who also served as researchers and mentors.

Over time, like the rest of the world, Caribbean societies have changed their economic emphases from a focus on agriculture to manufacturing, and later to services. In recent decades, there has been greater focus on higher education and bolder aspirations to become knowledge-based economies, and even to achieve developed nation status, by 2020 in the case of Trinidad and

Tobago and 2025 for Barbados. These aspirations require the expansion of higher education well over the average 15% of the relevant age group set in 1997 by Caribbean governments, and even beyond the 40% achieved recently in Barbados to well over 50%. The point which is being made is that in order to support the aspirations and operations of the region, the expansion of higher education is an agreed goal but it is costly.

In better economic times, governments have not only willingly supported the regional university—The University of the West Indies (UWI)—but have also established national universities and community and state colleges to help to meet their local demand for tertiary education graduates. Over the past 10 years, enrolment expansion has been no less than dramatic. However, as countries experience economic challenges, questions that were formerly mainly of academic interest and discussed by small groups have captured the interest of many and are increasingly publicly aired. These include:

- Who are the biggest beneficiaries of higher education?
- Who should pay for its burgeoning costs?
- What role should governments play? and
- What are some measures that higher education institutions can take to make their financing sustainable?

Many studies have shown that higher education brings significant private and social returns to the higher education graduate. That is not disputed but, over time, there have been divergent views not only about the relative weighting in absolute terms but also about whether there are differences in weighting in the context of the developing and developed world. Research has shown that, personally, the graduate gains increased social mobility, better jobs, and increased income. It has also shown that he/she pays more taxes, acquires improved social and life skills, improves his/her prospects of better health, and enhances his/her competencies to participate in democratic government and to offer wider and perhaps more impactful public service. This argument asserts that higher education confers both personal and social returns that have served as justification for governments across the world to invest heavily in higher education, not only for the individual beneficiaries but also for the public good—the country's own growth, development, and political stability.

As we all know, UWI has been financed from a number of sources, including:

- the governments of 15 countries (so far),
- tuition fees,
- investment of assets,
- fund-raising of various kinds, and
- philanthropic giving.

Each of these will be looked at in turn and from the added perspective of the Open Campus.

State Funding

As we know, over the years, state funding has been provided to support the work of the university centre as well as the individual campuses. My understanding is that the university would do an assessment of its operational cost and, using Full Time Equivalent (FTE) as its unit and the registration by country as its weighting, arrive at a proportional contribution by governments. Discounts were given to students sponsored by countries without a campus to compensate for the disadvantage of not having a campus and the attendant reduced services. Generally, tuition

fees were computed as a percentage of economic cost and students in most countries were responsible for the payment of these fees. Countries like Barbados pay these tuition fees on behalf of their students to any of the three physical campuses, but with certain conditionalities including duration and level of study, and, in the case of Medical Sciences and Law, within an agreed quota. At present in Barbados, no payment is made for study through distance education in the Open Campus. Through the Government Assistance for Tuition Expenses (GATE), Trinidad and Tobago pays the tuition for all approved programmes, including approved Open Campus courses, and for all nationals across the campuses, and indeed at all approved tertiary institutions within Trinidad and Tobago.

The Open Campus has classified all its students as part-time students, and seeks to be as flexible as the UWI Regulations allow it to be in the rate at which students can advance towards a degree. Many of its offerings are non-degree offerings and there is a wide range of certificate and diploma continuing education offerings. Therefore, the calculation of FTEs is complicated and difficult to standardize and communicate to governments in an acceptable way. Additionally, because of its predominantly distance mode, there is the potential for a lot of cross-national registration, which complicates the billing exercise to host governments. Jamaican nationals in The Bahamas, Cayman Islands, and Anguilla may register in those locations to do courses, and under the traditional model both the host governments and the official government seem uncomfortable with the billing to them. Similarly, the registration of Dominicans, Montserratians, and St. Lucians in Antigua would evoke a similar response.

The Open Campus has proposed a different approach for billing governments.

- Firstly, the Open Campus has committed to the use of a model that sees decreasing dependence on government financing over time. As such, the percentage of government contribution relevant to other income streams is estimated to decrease from 60:40 to 40:60 over five years.
- Secondly, the budget for the regional and local operations of the Open Campus is computed by the Open Campus, and attempts are made to recover these costs from governments in two ways. Individual governments are billed for the direct costs of operation of the local sites. Additionally, based on certain explicit criteria, sites are classified as large, medium, and small. The shortfall from the overall budget is calculated based on the difference between the budget and collections from the operation of the local sites. This shortfall is then apportioned based on the complexity of the site—small, medium, and large. Central costs are determined by the University Centre using FTE as the basis.

Tuition Fees

The intention is to increase the proportion of the contribution from tuition fees, and this is seen as achievable through the creation and promotion of high-demand and high-quality programmes. The approach is one of using individual courses as our operational unit, creating a costing model that recognizes and attributes a costing to all the inputs into course creation and all the delivery costs. By doing this we can determine how much it would cost to develop and deliver a course on our own or in partnership with our sister campuses. With this knowledge we can also negotiate the quantum of tuition fees that will allow us to break even, and the returns on investment that will accrue as we expand our student pool.

Some of our inputs include programme coordinating, course writing, instructional design and curriculum development, graphic design and other multimedia work, and peer review. Some of our delivery costs include course coordination, learning support, e-tutoring,

registration and examination services, course delivery administrative support, and site services.

The challenges include:

- getting UWI faculty to buy into this cost-sharing model to increase the pool and improve the quality of courses;
- obtaining funds and human resources with the requisite skills for the initial start-up costs for course development;
- obtaining funds for the optimal amount and type of marketing; and
- arriving at competitive and appropriate tuition fees in a climate where cash-strapped students complain, are short of scholarships, and are timid to or are unable to access loans; where students are requesting and might not honour payment plans; and where governments are late with disbursements.

Investment of Assets

We envisage at some time that there will be reserves for investment and where advanced payments can be invested in the long or short term to enhance revenues. However, the current climate of payment plans for student fees and delayed government payments have not helped to provide the up-front capital for such an investment. We also see prospects of selling services, including the use of our sites and telecommunications equipment and services. We envisage that our Computer and Technology Services (CATS) and our Learning Exchange may in time be able to provide services not only for the Open Campus but also to the rest of the university and other institutions in the region.

Fundraising

Fundraising is being pursued through loans and grants, spearheaded by the Principal's Office through the Caribbean Development Bank (CDB) and the Canadian International Development Agency (CIDA). Additionally, small research grants are being accessed by the Consortium for Social Research and Development, mainly through UNICEF and the European Union (EU). There is a Special Projects department that has been doing work with the Organization of American States (OAS) and which is collaborating with various regional organizations to access funds.

Philanthropic Giving

The Alumni groups in the UWI 12 are quite small but we are trying to motivate the fledgling associations so that we can benefit from their contributions to UWI. Thought is also being given to the issue of bonds: tax free by governments and through special initiatives such as educational cruises for our alumni and friends.

Threats to Sustainable Funding

One of the strategic goals of the Open Campus is financial viability and we see this as no small challenge; however, one of the first steps is to identify the challenges. We see these as:

1. The small population size and limited resources of the supporting states, particularly in the case of the UWI 12, which is where we would like to make the greatest impact.
2. The competition of the health and service sector with education in general, and higher education in particular, to get funding from the state.
3. The conflict between regional and national concerns within and outside of UWI. Outside of UWI, it presents as the anti-UWI sentiment and the desire to establish their own universities

in many of the contributing countries. Within UWI, it presents as the duplication of effort and a difficulty in joint ventures that have the potential for better quality and a wider market.

4. The creation and operationalization of an entrepreneurial culture within the Open Campus of UWI so that all departments—Admissions, Student Services, Academic Programming and Delivery, Open Campus Country Sites—have a commitment to marketing, production, service, building alumni support, wooing the private sector, and so on.

The Opportunities for the Open Campus

Sir John Daniel and colleagues at the Commonwealth of Learning have advanced the idea of the iron triangle of cost, quality, and access. Daniel, Kanwar, and Uvalić-Trumbić (2009) conclude that "the aims of wide access, high quality, and low cost are not achievable, even in principle, with traditional models of higher education based on classroom teaching in campus communities." UWI has doubled its face-to-face enrolment in only a few years but that has not been sufficient to meet the demand. Foreign providers, some with programmes of questionable quality, are coming in physically or virtually and are gaining ground.

Unrestricted by time or space and aided by modern information and communication technology, the Open Campus has the potential to achieve financial viability through the development of high-quality, student-friendly, relevant courses and programmes, developed in a timely manner in partnership with quality faculty members, marketed carefully, and delivered to a vast audience across the Caribbean and the world. However, if this is to be achieved, there has to be better dialogue, a better articulated and more transparent business model, and an understood and accepted costing model, so that the Open Campus and others can work together as trusted business partners to capitalize on this exciting and vast opportunity not only for the Open campus but for the entire UWI.

Reference

Daniel, J., Kanwar, A., & Uvalić-Trumbić, S. (2009, March-April). Breaking higher education's iron triangle: Access, cost, and quality. *Change: The Magazine of Higher Learning.* Retrieved from http://www.changemag.org/Archives/Back%20Issues/March-April%202009/full-iron-triangle.html

Plenary - Summary of Discussions

- Do we have what we need to do what we want?
- Budget for T. E. is lowest overall.
- Less than 1% of G.D.P. is invested in tertiary education
- We need to do more to increase our capacity
- Sharing and partnering critical to moving forward

Notes on Contributors

Ronald A. Brunton

Dr. Brunton is the Director of Qualifications and Recognition at the Accreditation Council of Trinidad and Tobago (ACTT), where he is currently involved in advising on recognition of local, foreign, and transnational qualifications, as well as the development of a Tertiary Qualifications Framework for Trinidad and Tobago. He is the Deputy Chairman of the Board of Directors of the Caribbean Agency for Higher Education (CAHED), a regional consulting body working with institutions, governments, NGOs, and other bodies interested in developing the region's higher education sector. Dr. Brunton completed his Ph.D. in the Sociology of Education at The University of the West Indies (UWI), St. Augustine. His research interests relate to quality and evaluation of higher education systems, educational indicators, alternative education delivery systems, and the role of education in national development.

Angela Escalante

Mrs. Escalante graduated from the Robert Gordon University, Scotland with a M.Sc. in Knowledge Management. She is also a graduate of the Arthur Lok Jack Graduate School of Business where she studied Management Information Systems. Mrs. Escalante has served in various faculties at UWI, St. Augustine. She joined the Business Development Office in 2006 where her duties include programme monitoring and evaluation and management of information.

Brian Michael Francis

Dr. Francis earned his Ph.D. in Economics from the University of Florida in December 2003, with specialization in International Trade and Economic Development. He also holds an M.Sc. in Development Finance from the University of London and a B.Sc. in Economics (with first class honours) from UWI, Cave Hill. In 1993, Dr. Francis was presented with a National Independence Award in Grenada for Academic Achievement in Economics. He is a former Permanent Secretary and Director General in the Ministry of Finance, Planning, Trade and Development in Grenada; Economic Advisor to the Government of Grenada; and Permanent Secretary in the Prime Minister's Ministry, Grenada, with responsibility for Project Development and Human Resources. At present, Dr. Francis is a full-time Lecturer in the Department of Economics, UWI, Cave Hill. Since joining the Department of Economics in 2004, Brian has published several papers in various regional and international journals.

Martin Franklin

Mr. Franklin is currently a Lecturer in Mathematical Methods and Statistics in the Department of Economics, Faculty of Social Sciences, UWI, St. Augustine and a Lecturer in Quantitative Methods at the Arthur Lok Jack Graduate School of Business. His work experience as an Associate with El Perial Management Services reflects a mix of extensive consulting in the public sector, aviation, and the private sector as well as operations management. Mr. Franklin is a graduate of UWI, Mona and McGill University, Montreal, Canada, where he obtained the B.Sc. in Mathematics with First Class Honours and the M.Sc. in Operations Research, respectively. He has published articles on flexible and distance education, ICT in development, HIV/AIDS, funding of tertiary education, and issues of economic development for small island states in various journals. In addition, he has written chapters in four books. His current research interests are the informal sector, remittances in the Caribbean, and the economics of Carnival.

Sandra Ingrid Gift

Dr. Gift is Head of the Quality Assurance Unit, UWI, St Augustine, with responsibility, principally, for the quality assurance reviews and evaluation of academic programmes. She

also currently serves as Institutional Accreditation Coordinator for the Campus in its candidacy for institutional accreditation with the Accreditation Council of Trinidad and Tobago (ACTT). Dr. Gift is a member of the International Network of Quality Assurance Agencies for Higher Education (INQAAHE). She has participated in numerous quality assurance and accreditation training activities, conferences, and workshops regionally and internationally, and is a trained evaluator with the ACTT. In her outreach portfolio, Dr Gift serves as Second Vice President of the Association of Caribbean Higher Education Administrators (ACHEA) and member of the Executive of the Trinidad and Tobago National Commission for UNESCO. Her current research interests include transnational education and an interpretive approach to accreditation.

Roger Hosein

Dr. Hosein graduated from Cambridge University in 2000, and joined the Department of Economics at the St. Augustine Campus of UWI later that year. He currently holds the position of Senior Lecturer. His research interests focus heavily on international trade with emphasis on education and economic development, especially in the Caribbean region. He has published some 23 articles in various journals, and in addition, he has written four books and chapters in nine other books.

Clément Imbert

Prof. Imbert is Professor of Materials and Manufacturing, UWI, St. Augustine. He is a Registered Engineer, Past President and Fellow of the Association of Professional Engineers of Trinidad and Tobago, Member of the American Society of Mechanical Engineers, former Secretary-General of the Council of Caribbean Engineering Organizations, and Council Member of the International Association for Continuing Engineering Education. Prof. Imbert is currently a Member of the Steering Committees of the International Network for Engineering Education and Research and the International Conference on Engineering Education; Chairman of T&TEC, MIC, and Birdsong Academy; and Board Member of the Accreditation Council of Trinidad and Tobago, National Training Agency, Caribbean Industrial Research Institute, Panland Trinidad and Tobago Ltd, and Princess Elizabeth Centre (for Physically Challenged Children). He is Chair of the Cabinet Appointed Committees on the Draft National Policy on the Development of Tertiary Education, Training and Distance and Lifelong Learning and the National Knowledge and Learning Network.

Robin Rabindranath Maraj

Mr. Maraj is the founder and Executive Director of the School of Business and Computer Science (SBCS). He has guided its evolution and development since 1987, from a small tertiary level institution to one of the region's premier multi-campus private tertiary level institutions. Mr. Maraj holds an honours degree from the University of Ottawa, specializing in Information Systems, Operations Research and Management; is an honorary fellow of the Association of Business Executives (ABE (UK)); and was awarded an honorary doctor of letters for his work in tertiary education by Heriot-Watt University in 2007.

Kofi Nkrumah-Young

Dr. Nkrumah-Young is the Vice President of Planning and Operations at the University of Technology, Jamaica (UTech). In this capacity he is in charge of the university's Strategic, Facilities, and Resource Planning and the Management of the Physical Facilities and Technology Information infrastructure. He has been with that institution since 1991 when he joined as its first Business Manager. Dr. Nkruman-Young's research interests are in financing and resource

allocation models at the systems and institutional levels in higher education. He has published in peer reviewed journals and lectures at both UTech and Mico University College. He has also done presentations on financing and resource allocation in higher education in the Czech Republic, Germany, The Netherlands, the United Kingdom, Uganda, and the Caribbean. He obtained his DBA in Higher Education Management from the University of Bath, England, an MBA in Finance, an Advanced Diploma in Banking and Finance, a BA in Theology from UWI, and a Diploma in Ministerial Studies from the United Theological College of the West Indies.

Bheshem Ramlal

Dr. Ramlal is a senior lecturer attached to the Department of Geomatics Engineering and Land Management, Faculty of Engineering, UWI, St. Augustine. He has worked at UWI for the last 21 years. Dr. Ramlal completed his Ph.D. in spatial information engineering in 1996 at the University of Maine. He obtained an M.Sc and a Postgraduate Diploma in Geoinformatics from the ITC, Netherlands and graduated with a B.Sc. in Land Surveying from UWI in 1988. At present Dr. Ramlal is the Public Relations Officer of the Institute of Surveyors of Trinidad and Tobago, and Vice President of WIGUT. He is also serving as deputy chairman of a Faculty of Engineering committee charged with developing a new Faculty Evaluation System for the Assessment and Promotion of Academic staff. Part of the mandate of the committee is to examine workload issues.

Vivienne Roberts

Prof. Roberts joined UWI in 1991 as Project Coordinator of a UWI-administered, multi-million USAID development training project for the Eastern Caribbean. After the project ended in 1996, she served as Senior Programme Officer in the newly established Tertiary Level Institutions Unit (TLIU). In 2008 she was appointed Deputy Principal of the Open Campus. She has a bachelor's degree in Chemistry and Zoology from UWI, a master's degree in Educational Leadership from the University of Tennessee in Knoxville, USA, and a Ph.D. in Educational Administration from UWI. Her teaching career includes the Teaching of Science at the Barbados Community College and Educational Leadership at UWI. Before her appointment as Deputy Principal, her administrative experience included Head of the Division of Health Sciences at Barbados Community College (BCC) and Acting Director of the TLIU. Her research interests include tertiary education development and organization in the Caribbean, access to education, and quality assurance.

Notes on Editors

Shamin Renwick

Mrs. Renwick is currently the Faculty Liaison Librarian for Science and Agriculture, Alma Jordan Library, The University of the West Indies (UWI), St. Augustine, Trinidad and Tobago and the Treasurer of the West Indies Group of University Teachers (WIGUT), St. Augustine. She obtained an M.Phil. in Agricultural Extension and MLIS from UWI and completed the "Leadership Institute for Academic Librarians" at Harvard University in 2009. She has 25 years of experience working in education, science, and health libraries; presented papers, workshops, and posters at conferences; written several refereed publications; and co-edited a book entitled "Caribbean Libraries in the 21st Century: Changes, Challenges, and Choices." Mrs. Renwick is a Past President of the Association of Caribbean University, Research and Institutional Libraries (ACURIL) and is a Fellow of the Chartered Institute of Library and Information Professionals (CILIP), UK.

Lynda Quamina-Aiyejina

Mrs. Quamina-Aiyejina is Head of the Caribbean Educational Research Information Service (CERIS), which is a computerized information service that provides access to information on education in the English-speaking Caribbean. CERIS also provides editorial services to the School of Education, and is responsible for the publication of all documents bearing the imprint of the School of Education, including the journal, *Caribbean Curriculum*, the Monograph Series, and the Technical Reports Series. Mrs. Aiyejina has been a practising librarian since 1975, and has worked in libraries and information centres in Trinidad, Jamaica, and Nigeria. Her major interests lie in the areas of reference and bibliographical work, and editing. She had published several bibliographies and other reference works; co-authored some of the publications arising from the Trinidad and Tobago component of the Multi-Site Teacher Education Research Project (MUSTER) project; and was the Series Editor for the monograph series that formed a major part of the Education for All (EFA) in the Caribbean Assessment 2000.

Appendix : Seminar Programme

WIGUT Educational and Professional Development Seminar

Sustainable Funding of Higher Education in Challenging Times

4 March 2010, Daaga Hall, UWI, St. Augustine

PANEL 1: Funding Models and Case Applications in Higher Education

9:15-10:15 a.m.

Chair – Dr. Brian Francis, Department of Economics, UWI, Cave Hill

- **Dr. Kofi Nkrumah-Young -** Vice President, Planning and Operations, University of Technology, Jamaica
- **Dr. Roger Hosein** – Department of Economics, UWI, St. Augustine

PANEL 2: Traditional and Entrepreneurial Approaches and Models in Higher Education

10:30-11:30 a.m.

Chair –Prof. Timothy Shaw, Institute of International Relations, UWI, St. Augustine

- **Mrs. Angela Escalante -** Business Development Office, UWI, St. Augustine
- **Dr. Linda Steele -** Office of the Campus Registrar, UWI, St. Augustine
- **Dr. Kofi Nkrumah-Young -** Vice President, Planning and Operations, University of Technology, Jamaica

PANEL 3: Quality Assurance and Return on Investment

11:30 a.m.-12:30 p.m.

Chair –Dr. Anna-May Edwards-Henry, Instructional Development Unit, UWI, St. Augustine

- **Dr. Ronald Brunton -** Accreditation Committee of Trinidad and Tobago
- **Dr. Sandra Gift -** Senior Programme Officer, Quality Assurance Unit, UWI, St. Augustine

PANEL 4: Education for Free or for Fee?

1:30-2:30 p.m.

Chair – Dr. Michael Toussaint, Department of History, UWI, St. Augustine

- **Prof. Clément Imbert**, Professor of Materials and Manufacturing, UWI, St. Augustine
- **Mr. Robin Rabindranath Maraj**, Principal, School of Business and Computer Studies, Trinidad and Tobago

PANEL 5: Cost-cutting and Workload Issues

2:30-3:30 p.m.

Chair –Dr. Indira Rampersad, Department of Behavioural Sciences, UWI, St. Augustine

- **Dr. Brian Francis**, Lecturer, Dept. of Economics, UWI, Cave Hill Campus
- **Dr. Bheshem Ramlal**, Senior Lecturer and Vice-President, WIGUT St. Augustine
- **Mr. Rennie Dumas**, Minister of Labour and Small and Micro Enterprise Development, Trinidad and Tobago

PANEL 6: Funding the Academy

3:45-4:45 p.m.

Chair –Dr. Bishnu Ragoonath, Department of Behavioural Sciences, UWI

- **Dr. Godfrey Steele**, Senior Lecturer and President, WIGUT St. Augustine
- **Prof. Vivienne Roberts**, Deputy Principal, Open Campus, UWI

Plenary and Closing Remarks

4:45-5:15 p.m.

Summaries from Panels 1-6 Chairs and Rapporteurs 3-minutes each with slides

Next steps towards policy formulation

Vote of Thanks

5:15-5:20 p.m.

Ms. Marilyn Lewis, Secretary, WIGUT St. Augustine

Reception at Senior Common Room

5:30-7:30 p.m.

Ms. Elmelinda Lara (Executive Member, WIGUT St. Augustine) and Team