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Recommendations for 21st Century Post-Secondary Education in Guyana and Other Developing Countries

The number of students worldwide enrolled in post-secondary (tertiary) education reached 170 million in 2009 and is expected to grow to at 1.4% per year between 2011 and 2020 to almost 200 million (British Council 4-5). One estimate says that the number of students worldwide will be 269 million by 2025 with a more than 3% average annual growth in Africa, the Middle East, Asia, Central America and South America over the preceding 20-year period (Maslen). This means that worldwide there will continue to be a great demand for post-secondary education both by developed and developing countries.

Guyana, an English-speaking developing country in South America, has functioning elements of its post-secondary education structure that will help to meet the increased local demand for post-secondary education. However, the elements necessary for a quality 21st century post-secondary education are missing, such as a national 'education for development' policy and/or policy framework, proper quality assurance mechanisms, institutional effectiveness mechanisms and a community college.

This paper first examines the current state of post-secondary education in developing countries and Guyana and then it describes what constitutes quality post-secondary education, followed by a discussion on the future of post-secondary education in developing countries.

Finally, recommendations are made that can be put in place by Guyana, and most other

developing countries, to ensure that its citizens have quality, affordable and equally available post-secondary education. Four recommendations are made that take a holistic approach to achieving quality education in developing countries including Guyana. This four-pronged approach to achieving quality post-secondary education focuses on: i) policy, ii) quality assurance and assessment, iii) institutional effectiveness, and iv) community college development.

1. Post-secondary education in developing countries

Over the last two decades the number of students globally who were enrolled in post-secondary institutions has grown a great deal and is projected to continue growing as societies develop and there is a greater need for a post-secondary education in an ever increasing knowledge driven world economy. Globally, between 2000 and 2007, there has been a 53% increase in the number of students enrolled in tertiary education worldwide to more than 150 million (Altbach, Reisberg, and Rumbley vi), which reached 170 million in 2009 and is expected to grow to at 1.4% per year between 2011 and 2020 to almost 200 million (British Council 4-5). Though much of this increase is in the developed world, one estimate says that the number of students worldwide will be 269 million by 2025 with a more than 3% average annual growth in Africa, the Middle East, Asia, Central America and South America over the preceding 20-year period (Maslen).

Developing countries face and will continue to face increased demand for post-secondary education institutions and the skilled graduates they produce and are beginning to realize the importance of post-secondary education and its role in, and relationship to, development.

Chapman and Austin notes that governments recognize the need for their education system to produce citizens with the skills necessary to succeed in the new technological and information

based economy, and that they cannot alienate students and their families who wish to better themselves by improving their education to succeed in this new economy (14). Consequently, governments of developing nations, who have always had a role in higher-level educational institutions, are now redefining their relationships with these institutions so that they have more say in the role these institutions play in the development of their countries.

Historically, in developed and developing countries, the government has always contributed financially to the development of post-secondary institutions and has directed public policy on education that are in line with that country's development goals. However, in recent times because of the rising demand for post-secondary education in developing nations there has been an influx of non-state sponsored or private post-secondary education institutions, which only respond to demand for an education product and are generally not interested in public policy or a country's development goals. Naidoo urges caution and recognizes that both government and private enterprises are needed in developing countries to meet the demand for post-secondary education, and that "it may therefore be necessary to pay much closer attention to developing policy that might shape the operation of markets in higher education" (13).

2. Post-secondary education in Guyana

The Ministry of Education in Guyana is the largest Ministry in Guyana and is responsible for overseeing the education system in Guyana from nursery to university. Based on extracts of its Digest of Education Statistics, the Ministry had a little under 14,000 students enrolled in post-secondary government run institutions for the 2011/12 academic year (89-124).

At the post-secondary and tertiary level, the education system in Guyana comprises the following functioning components:

Technical and vocational education

- Teacher training education
- University level education
- Continuing education (Ministry of Education Guyana "Strategic Plan" 15)

There are eight technical and vocational education institutions with over 4,700 students enrolled, which is about 34% of the post-secondary student population. There is one teacher training facility with almost 1,800 students enrolled, which is about 13% of the post-secondary student population. There is one university, which has almost 7,400 students, which is about 53% of the post-secondary student population (Ministry of Education Guyana "Digest: Technical"; "Digest: Tertiary").

The National Accreditation Council of Guyana was established in July 2004 by an act of parliament requiring that all post-secondary institutions in Guyana be registered and it aims to establish a quality assurance system that promotes quality education in Guyana (Nat'l Accreditation Council, "About"). According to its website, there are 17 post-secondary education institutions in Guyana that were fully registered, provisionally registered, or in the process of being registered (Nat'l Accreditation Council, "Registration Status"). However, there was no data on the number of students enrolled in any or all of these institutions, the nature or type of post-secondary education activity conducted by each institution, and the details of its assessment and quality assurance activities.

3. What constitutes quality post-secondary education?

Finding a proper definition of what is quality post-secondary (higher) education is difficult and tedious at best. The author will focus rather on the systems for quality assurance in education and their appropriateness for measuring the quality of post-secondary education.

Bogue describes at least four systems for quality assurance in colleges and universities:

- Accreditation and program reviews
- Assessment-and-outcomes
- Total Quality Management (TQM)
- Accountability and performance indicators (9)

3.1 Accreditation and program reviews

Most developed countries around the world have some form of accreditation process, but in the United States accreditation is know as "the oldest and best known seal of collegiate quality" (Bogue 10). Accreditation is described by Bogue as being "built on the premise and the promise of mission integrity and performance improvement" (10) and involves "periodic institutional or program of self-study, followed by a visit by an external panel of peers who evaluate the program's or institution's compliance with a set of external standards" (10). Program reviews are a highly regarded instrument of quality assurance occurring at the discipline level, program level or department level, and involves a self-study and external peer-review (Bogue 10).

3.2 Assessment-and-outcomes

This is used to measure academic quality and involves assessing student learning to ensure that it maps to desired stated outcomes for courses and/or programs. Bogue states that "we can, and should, know as much about our students upon their exit as we do upon their entry—about the changes in their knowledge, skills, and attitudes" (11) and 'outcomes assessment' measures and quantifies these changes in knowledge, skills, and attitudes.

3.3 Total Quality Management (TQM)

This system of quality assurance was initially designed for companies in the manufacturing sector and has been tried out education. It focuses on continuous improvement

and customer satisfaction and uses customer feedback for this, where the customers are the students. TQM has been very successful at measuring quality in the non-academic aspects of post-secondary education institutions such as advising, registration, facilities management, and other administrative procedures (Bogue 12; Law 67).

3.4 Accountability and performance indicators

Accountability is reporting to 'benefactors' information such as enrollment trends, retention and graduation rates, job placement rates and pass rates on licensure and other professional examinations; whereas performance indicators are quantitative data on any aspect of the institution that relates to a program or institutional goal (Bogue 13).

4. The future of post-secondary education in developing countries

The demand for post secondary education in developing countries will most likely rise because of the need for skilled workers who can effectively participate in the new global knowledge-based economy. With this expected increase in demand for post-secondary education, governments or private institutions will have to provide this education to the people who need it. However, the cost of this education should not be out of the reach of the average citizen, and should not be seen as an elitist item, but rather as an entity that can lead to an improved standard of living for the individual and an improved economy of the nation.

Developing nations will also need to broaden their post-secondary education base in order survive and succeed in this new knowledge based economy. Mellow and Katopes stress that developing nations must educate more citizens to higher levels, espousing a greater number of citizens with mid-level inetllectual skill sets, which they argue will lead to a larger middle class enabling citizens to move across income levels (56). They argue that the community college is a perfect means of doing this because "a community college system could offer a

model of higher education that provides flexibility in terms of curriculum and training and is at the same time deeply tied to the specific character and needs of the local economy" (58).

Spangler and Arthur observe that in most developing countries there is a missing link between secondary school and the workforce or between secondary school and university (43), which when coupled with the fact that there is an increasing need for skilled workers to fill the vacancies in the growing knowledge economies of developing nations hilights the need for more community colleges in developing countries. "UNESCO's Education for All campaign is one example of an initiative that is being promoted as a way to import the American community college model" (Spangler and Arthur 42) as a means of expanding the skills set of the the workforce in developing nations.

According to Chapman and Austin, the future of higher (post-secondary) education in developing countries depends on the complex relationship between governments, its citizens and higher education institutions, and that "the main challenge of the next decade centers on how institutions define and shape their external relationships with government, on one hand, and with the larger citizenry, on the other" (4). The following critical issues will face developing nations in the coming years regarding higher education:

- Publically funded higher education institutions will have to be more accountable.
- Growth of higher education institutions will have to be managed so that equity is preserved, costs are managed, and quality is maintained.
- New relationships between governments and higher education institutions will have to be
 forged in order to mitigate the stress that will be caused by the shift towards the
 privatization and decentralization of higher education.

• Governments and higher education institutions will have to deal with increased autonomy that allows institutions to manage themselves within the government's policy directives and/or budget (Chapman and Austin 4).

5.0 Recommendations for Guyana and other developing countries

Public and private post-secondary education institutions in Guyana and other developing countries must to work together with government and citizens to ensure quality, affordability, and equity of availability of post-secondary education. Here are four main measures that can be put in place to make this happen:

- Post-Secondary education development policy,
- Quality assurance and assessment,
- Institutional effectiveness, and
- Community college development.

5.1 Post-Secondary education development policy

There should be a national post-secondary education for development policy that, among other things, safeguards economic development, meets the current and anticipated socio-economic needs of Guyanese people, guarantees quality, affordable post-secondary education that is equally available and affordable to all citizens. Such a policy should be within the context of an 'education for development' framework, part of a ten or twenty year plan to use education as a means of economic and social development for the country and be cognizant of the fact that government will not be able to meet the demand for tertiary education.

A post-secondary education development policy has to be visionary, it has to take into account the public interest that post-secondary education serves and it has to protect the country and its citizens from education commodification while allowing the private sector help to meet

the demand (Naidoo 4). This policy should also ensure that every post-secondary education institution serves the public good and is not just part of an economic development strategy, while at the same time it should not be too rigid so as to deter foreign investors in post-secondary education (Singh 11). Public education policy and national education policy frameworks is nothing new, and has been used to transform nations into regional hubs of learning for higher education (Naidoo 7), and the same can be done in Guyana if such policy is prudently established and managed.

Based on the foregoing, here is a summary of some of the elements of a national postsecondary education for development policy:

- Vision.
- Safeguards economic development.
- Meets the current and anticipated socio-economic needs of its people.
- Guarantees quality, affordable post-secondary education that is equally available and affordable to all citizens.
- Within the context of an 'education for development' framework.
- Part of a long-term plan to use education as a means of economic and social development.
- Take into account the public interest that post-secondary education serves.
- Protect the country and its citizens from education commodification while allowing the private sector help to meet the demand.
- Ensure that every post-secondary education institution serves the public good and is not
 just part of an economic development strategy.

5.2 Quality assurance and assessment

Establish a national body to monitor post-secondary quality assurance assessment and based on the results of regular assessment accredit public and private post-secondary institutions:

- Establish a national post-secondary education quality assurance and assessment body and create a permanent office for this body.
- Conducting comprehensive quality assurance reviews of all post-secondary institutions in
 Guyana that include reviews of their programs, analyzing their assessment and outcomes,
 and assessing their total quality management, accountability and performance indicators
 will be the responsibility of the post-secondary education quality assurance and
 assessment body.
- Issuing accreditation statuses based on the outcomes of quality assurance reviews will be the responsibility of the national post-secondary education quality assurance and assessment body.
- Ensure that the post-secondary education quality assurance and assessment body has rotating and permanent members and officers.
- Ensure that the post-secondary education quality assurance and assessment body has a
 five year review schedule and cycle that details when post-secondary education
 institutions will be assessed for quality assurance.
- Publicly funded post-secondary education institutions must be subjected to regular assessment from the post-secondary education quality assurance and assessment body.

The National Accreditation Council of Guyana is the first step towards a body such as the one outlined above. However, based on its document 'general conditions for maintenance of registration of post secondary and tertiary institutions', the National Accreditation Council of Guyana is primarily concerned with the registration of private post-secondary institutions and

does not speak to regular detailed assessment as a quality control mechanism. Its operational mandate needs to be widened to include regular comprehensive quality assurance mechanisms as outlined above.

5.3 Institutional effectiveness

Establish a national post-secondary education institutional effectiveness review board, where all government funded post-secondary education institutions must undergo a five-year institutional effectiveness review as part of comprehensive quality control measures and to verify that these institutions meet the current and perceived future needs of the society:

- Establish a national post-secondary education institutional effectiveness review board and create a permanent office for this board.
- Verifying that publicly funded post-secondary education institutions meet the current and
 perceived future needs of Guyanese society will be the responsibility of the postsecondary education institutional effectiveness review board.
- Ensure that the post-secondary education institutional effectiveness review board has rotating and permanent members and officers.
- Ensure that the institutional effectiveness review board has a five year review schedule and cycle that details which post-secondary institutions will be reviewed for institutional effectiveness and when.
- Publicly funded post-secondary education institutions must be subjected to regular review from the post-secondary education institutional effectiveness review board.

The five-year institutional effectiveness review period can serve as a point at which metrics used to measure institutional effectiveness can be reviewed along with the effectiveness of the collection of all public post-secondary institutions in Guyana. In essence, this can be the

basis for a regular five-year inquiry into the effectiveness of the post-secondary institutions, the effectiveness of the post-secondary institutional effectiveness measures, and a source for continuous improvement of the post-secondary institutional effectiveness measures and post-secondary institutions themselves.

5.4 Community college development

Spangler and Arthur notes, "there is an urgent and growing need among developing nations to import foreign educational institutions for the purpose of fostering their own economic development and capacity building" (41). One such educational institution is the community college because they "can deliver an educated workforce affordably, efficiently, quickly, flexibly, and responsively, especially in countries where trained, skilled workers are increasingly in demand" (Spangler and Arthur 50).

The existing education system in Guyana does not include a community college. The government or private entities need to develop and build a community college into the country's post-secondary education system. This community college would be set up to ensure an easy transition from secondary school to university by serving as a bridge between secondary and university education for those initially unable to obtain admission to the University of Guyana or other universities, and would enhance the skills of the nation's workforce by offering specific and relevant short programs complimented with recognized qualifications (Captain).

Here is a list of some of the possible goals of a community college integrated into the existing education system in Guyana:

 Prepare students for baccalaureate programs at the University of Guyana and other universities locally and worldwide by offering associate degree programs.

- Enhance the skills of the Guyanese workforce by offering certificate programs that
 guarantee a certain level of knowledge, skills and competence in specific areas relevant to
 the social and economic development of Guyana.
- Enhance the skills of the Guyanese workforce by offering short professional development courses, sponsored by the companies and organizations that want them, and geared towards the specific needs of that company or organization, groups of companies or organizations, or public demand and are in line with an 'education for development' policy.
- Offer remedial classes for students who were not fully successful at the CXC examinations but would nonetheless like to pursue higher education.
- Bridge the gap between secondary and university making it easier for students who
 cannot gain entrance to university initially to make up for their academic deficiencies
 (Captain).

Benjamin states that "education is a key to human capital development, and therefore a key goal national leaders will take on is how to improve their educational infrastructure" (13). A community college is a great means of improving educational infrastructure in a developing nation such as Guyana.

6. Conclusion

The demand for quality post-secondary education has been rising and will continue to rise for the next few decades because the 21st century workforce is a knowledge-based workforce. Developing countries, such as Guyana, need to adjust their education development strategy to deal with the increased demand for, the quality of and the effectiveness of post-secondary education institutions. A comprehensive four-pronged approach rooted in a sound and

prudent education for development policy and/or framework can help to develop a sustainable quality post-secondary education system in Guyana and other developing countries. This holistic approach has as its foundation a prudent education for development policy and also includes quality assurance mechanisms, institutional effectiveness mechanisms and developing a community college. Using this approach, governments can work with public and private post-secondary institutions to ensure that education is excellently used as a tool for national development, delivering quality, affordable and equally available post-secondary education for Guyana or any other developing country.

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