## Reaching Amputated Spirits: Reducing the Attrition of our Black Boys in the Bermuda Public School System through Career Technical Education Radell Tankard

#### Abstract

The concern of young black boys being unproductive in society continues to be an issue for many in the island of Bermuda. One of the major reasons for this dilemma is that many are leaving the Bermuda Public School System before graduating. In an effort to deter the boys from exiting out of the school system, a pilot programme known as the Applied Technology Certificate Programme was launched at the start of the 2016-2017 academic school year. Through collaboration and cooperation, educators within both the Department of Education and the Bermuda College allowed 24 boys in Bermuda's two public senior schools, who expressed an interest in technical education, to participate in this dual enrollment technical programme at the Bermuda College. Using the constructivist approach, the programme is structured to enable the young men to attend classes three days a week at the Bermuda College and to spend the remaining two days at their respective senior schools. After the first semester of being dually enrolled at the Bermuda College, the senior school boys demonstrated academic proficiency and were inspired.

KEY WORDS: Transferring out, constructivist, technical education, inspiration

#### Introduction

The Bermuda Public School System is a four-tiered educational system totaling just over 5000 students -2654 males and 2475 females. The system comprises 35 schools in total. At the lowest level there are 10 pre-schools, followed by 18 primary schools, 5 middle schools and, finally, 2 senior schools. Public education in Bermuda is free and students are legally required to attend school up to the age of eighteen years old. Upon completing senior school and meeting graduation requirements, students are awarded the Bermuda School Diploma (BSD).

The Student Management System (SMS, 2016) in the Bermuda Department of Education revealed that the graduation rate for 2015 and 2016 remained at 92%. In 2014, however, the graduation rate was 95%. In terms of gender and graduation, females outnumbered males. For example, in the 2016 graduating class, approximately 62% of the graduates (120/195) were females while males constituted 38% (75/195). In 2015, females, again, out graduated males almost two-to- one with 62% of the graduates (143/232) female and 38% (88/232) male. In 2014, 66% (99/150) of graduates were female and 34 % (51/150) were male.

Information from the Bermuda, Department of Education (SMS, 2016) shows that one of the major reasons that more females than males have graduated over the last three years is the fact that more males choose to transfer out of the Bermuda Public School System (BPSS) before graduating (SMS, 2016). Among the many reasons for males choosing to do so are the following:

- leaving the island to attend school overseas,
- departing to attend a home school or alternative school for smaller classes,

- failing grades in mathematics and English Language Arts (9th and 10th grades),
- fear of repeating academic year,
- wanting a General Education Diploma (GED), and
- attending a religious school

According to the Department of Education (SMS, 2016), the exit trend has been disturbing; a total of 337 students transferred from the BPSS. Of this number, 212 were males and 125 were females. More than half of the boys, 53% percent or 112 of them who transferred out, are young black boys and did so to attend either an alternative school or a home school. Forty- four percent (44%) or 92 boys transferred and planned to attend a high school either overseas or a private school on island. The remaining 3% or 8 boys either transferred to the alternate senior school or died (SMS, 2016).

Of the 53% who selected to attend either a home school or a learning centre such as the Adult Education School (AES) or C.A.R.E. Learning Centre (SMS, 2016), there is speculation if these boys actually attended such schools. Equally important is the fact that no-one really knows if this population actually obtained a high school diploma. Admittedly, in some respects one could also say the same about the population who elected to travel overseas to school.

The potential for students to drop out can be reversed by increasing teacher expectations and parental involvement as well as through developing a relevant curriculum with positive peer pressure and cooperative learning. Kunjufu (1989) contends that improving self- esteem can help to reduce the number of students dropping out of school. Improving one's self esteem can aid in reversing the dejected spirits of students.

### The Need for Technical Education

Allowing this thought to take root and in an effort to help reduce the attrition rate of the boys in the island's two senior schools, a more comprehensive approach to learning for students is definitely needed. Cotner and Folkers (2012) argue that the constructivist approach is a workable solution to this problem because it places a heavy emphasis on the active role of the learner. In other words, students will learn by doing. The constructivist approach is known to improve graduation rates, reduce remediation, develop critical skills as well as help high school students meet industry standards. In a nutshell, the authors argue that this approach embraces technical education, and many educators are now recognising the importance of career and technical education.

According to a Harvard Graduate School of Education Report on Technical Education (2011), there are two popular approaches to implementing technical education. One is the apprenticeship model found mostly in Europe, and the other is work-based learning seen more frequently in schools in the United States. The second model is one where vocational and technical education is combined with school-based and work-based learning. This model gives students the opportunity to apply theoretical concepts to real-life work situations; as a result, students are exposed to and experience the relevance and significance of classroom theories. This model also provides the opportunity for students to spend time in both the classroom and industry, thereby equipping them with practical experience while they learn.

Moreover, an online education glossary (2017) states that technical education today is commonly referred to as Career and Technical Education (CTE) and may be defined as an applied field of study that offers educational programmes inclusive of skilled trades, applied science, modern technologies, and career preparation. As such, the educational programmes offer courses that are both academic and career oriented and allow students to obtain first-hand work experience through internships, work shadowing and on-the-job training. The learning experiences can span from a number of careers, ranging from automotive technology and construction or electrical contracting to fields such as fashion design, filmmaking, forestry, healthcare and robotics, to name a few. Career and Technical education courses can be offered at the middle-school and senior-school levels as well.

Stressing the importance of technical education in the United States while visiting a Brooklyn Technology Early College

High School in 2013, President Obama indicated that schools of this nature render an opportunity to prepare the next generation for competition in a shrinking world market place. According to Baker (2013), Obama further noted that America should be doing everything to give more kids the chance to go to schools like this. The importance of assisting students pursuing technical education in Bermuda is also being addressed on the island.

On March 16, 2018, *The Royal Gazette* online quoted the Minister of Education and Workforce Development, the Honourable Diallo Rabain, in the House of Assembly stating that "students with financial difficulties could take advantage of more accessible scholarships." One of these scholarships is the new Minister's Applied Technology Scholarship for graduating public school dual-enrolment students who are currently in the Applied Technology Programme at the Bermuda College. The scholarship is valued at \$5,000.00 to assist students in completing their Associate's Degree in a technical field of study at the Bermuda College.

In discussing the twenty-first century workplace in Bermuda, it is clear that technical education is needed now more than ever, particularly if one considers the job opportunities for Bermudians listed in 2015 Bermuda Job Market Employment Briefs.

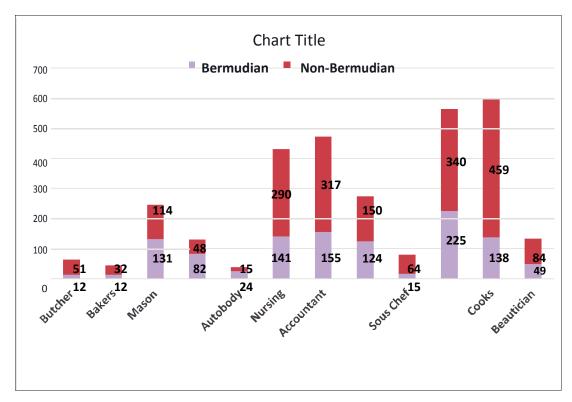


Figure 1: June 2015 Bermuda Job Market Employment Briefs

Figure one is representative of professions such as butchers, bakers, masons, auto mechanics and bodywork mechanics, sous chefs, waiters/waitresses, cooks and beauticians. These are areas of job opportunities for Bermudians (Bermuda Job Market Employment Briefs June, 2015).

### Brief Historical Background of Technical Education in Bermuda

It cannot be overstated that technical education has been vital to the development of Bermuda since most black men worked in this area after the abolition of slavery. Eugenia Simmons reported that skilled black mechanics outnumbered skilled white mechanics post 1834 (Johnson, 2003). Black males received much of

their vocational training at the Dockyard. However, the training came to a close temporarily with the closure of the Dockyard school in 1951 as well as when black secondary schools failed to deliver technical education. Technical education resurfaced again with the opening of the Bermuda Technical Institute (Johnson, 2003).

Williams (1964) helps us to understand that when the Bermuda Technical Institute opened its doors in 1956, the purpose of the school was three-fold:

- To function as a technical school.
- To fill the pressing need of developing competent tradesmen in the building trades and garages as well as in the hotels and guest houses and commercial enterprises.
- To stay in touch with local employers to provide them with a source of labor (Williams, 1964).

J. T. Christopher (2009) revealed that when the leaders of Bermuda were contemplating implementing technical education in local schools, they were seeking to replicate in our community the class structure existing in the British Isles in the early part of the twentieth century. This was a structure based on the 1944 Education Act in the United Kingdom. Inclusive of the types of high schools planned were grammar schools, technical schools, and general secondary schools. In 1955, the Government began to implement an educational system that followed the pre-existing Government high schools to have Boards of Governors to function as the grammar component. The technical component was the Bermuda Technical Institute and the Hotel School while the general secondary component consisted of Prospect and the combined garrison buildings in St. George's. The significan**ce** of secondary education is it being the prerequisite for developing the core of leadership in a society (Christopher, 2009).

In 1972 and after sixteen years of servicing the public, primarily young black boys, the Bermuda Technical Institute closed its doors. More than 600 males had passed through the school (Williams, 1964). Many of the Technical Institute alumni at the time believed the closure of the institution was a way of denying young black males the opportunity to develop the necessary skills needed for them to become leaders in fields such as construction and motor technology. In 1974, when the Bermuda College opened, technical education was a component of study at the institution; however, it was not as comprehensive as [presented] at the old Technical Institute (Christopher, 2009).

The reduction of focus in technical education at the Bermuda College resulted in a greater emphasis and value on traditional academics. Addressing the issue of technical education and black boys at a public forum entitled *The Black Agenda*, Ayo Johnson quoted Dr. Eugenia Simmons as saying:

Applied vocational education is not second-rate education reserved for those who cannot handle the academic rigour of liberal arts education. If it were the case, we would not have had the large numbers of graduates from the Dockyard schools and the Technical Institute who went on to become successful businessmen in their own rights and to hold prominent positions in both Government and private sectors. (p. 2)

Needless to say, many young black males desired to engage more in hands-on learning. This was one of the findings in the Mincy Report (2007) which examined 'Employment, Earnings and Educational Gaps between Young Black Bermuda Males and their Same- Age Peers.' Structured interviews were also conducted with the participants of the study. Many planned to attend the Bermuda College after graduating from high school because tertiary-level education was free (at the time) and the institution offered trade certificates and associate degrees. Several of the participants interviewed expressed an interest in the trades (Information Technology (IT), electrical, carpentry, Heating, Ventilation, and Air Conditioning (HVAC), etc.) because they enjoy 'working with their hands.' They also plan to own their own business because they desired to be their own bosses. Upon completing the study of the young black males in Bermuda, Dr. Mincy recommended two widely reputable programmes in the United States – the Job Corps

Programme and the Career Pathways Programme (Mincy, 2007), with the latter being implemented in the Bermuda Public School System in 2012.

The nature of the Career Pathways Programme involves students selecting one of five categories for work placement or advance study:

- College Preparation Courses,
- Applied Technology
- Business and Hospitality
- Health and Human Services
- Athletics, Arts and Communication

The experience lasts for twelve weeks with the intent of students receiving a first-hand learning experience. Upon successfully completing the work release/study programme, students will receive 1 credit, which contributes towards their graduation.

Since the start of the Career Pathways Programme, students have obtained national and/or international certifications. For example, they have achieved the Associates in General Insurance, the City & Guilds Employability Skills Certificate, and the Nurses Aid Certificate. They have also been successful in obtaining summer internships in international business. Among some of the companies participating in the programme were Greycastle Life Re, Hannover Life Re Bermuda Limited, and Kane LPI Solution. Some students were also successful in obtaining either part-time or full-time employment in establishments such as Flanagans Restaurant, Keen Construction, and Noble Auto. In many respects, the success of the Career Pathways Programme allowed officers within the Department of Education, principal leaders and school counselors to willingly embrace the Applied Technology Certificate Programme.

### The Applied Technology Certificate Programme and Structure

Modeling the work-based learning approach commonly found in the United States, the Department of Education, in collaboration with the Bermuda College, implemented the Applied Technology Certificate Programme in the Fall of 2016. This programme was a pilot study designed to help prepare students in the Bermuda Public School System to graduate, as well as acquire the necessary skills to enter the job market.

The Applied Technology Certificate Programme is a two-year experience at the Bermuda College. Student expectations at the completion of the programme are listed.

- Graduate with a Bermuda School Diploma (High School Diploma)
- Receive the Applied Technical Certificate
- Obtain the City & Guilds Employability Skills Certificate
- Complete an internship
- Obtain full-time employment (entry level) or full-time/part-time enrolment at the Bermuda College or technical school overseas

To be admitted to the Applied Technology Certificate Programme, students were required to have the following components:

- Express an interest in the programme
- Have completed S2 of senior school

- Obtain parental approval
- Interview with a Bermuda College counselor.

The Applied Technology Certificate Programme includes introductory classes to technical careers such as carpentry, plumbing, HVAC, computers, etc. Physics and applied mathematics are also a part of the curriculum. A total of five instructors (four males and one female) are assigned to deliver the curriculum to the boys. A 'Skills for Life' course is an essential component of the programme. In this class, the young men are taught life skills and have the opportunity to address male concerns.

Mentoring is another key component of the programme. After deciding on a concentrated area of study, students will be engaged in internship experiences in the second year of the programme with the hope that they return to the Bermuda College for a third year as Associates Degree candidates.

When the programme was launched, a total of 24 young black male students between the ages of 16-18 from CedarBridge Academy and the Berkeley Institute enrolled in the Applied Technology Certificate Programme (SMS, 2016). The boys were on the Bermuda College campus three days a week – Tuesday, Wednesday, and Thursday – while attending regular classes at their respective senior schools on Mondays and Fridays. When they are at their respective senior schools, they are supervised and mentored by a male teacher.

As of December 2016, the young men were performing extremely well in the programme. For example, at the end of their first semester (December, 2016) all except one student performed to the academic standards of the Bermuda College. Students inspired to learn is one of the main reasons they are doing so well. This information was obtained from a simple questionnaire that was administered to them in December 2016. The questionnaire was designed to collect qualitative feedback from the boys to learn about their thoughts and attitudes regarding their new academic experiences (See Appendix).

The results from the questionnaire (December 2016) noted that more than 95% of the boys enjoyed the learning environment at Bermuda College. The overwhelming majority also believed that they could graduate with the BSD, and that they possessed the skills to do well in the current programme. Most of them also said that they were inspired about learning; however, the reasons differed. Some said that their teachers made learning fun and gave them a better understanding of the subject matter. Others noted that they were inspired because the teachers encouraged them.

Boykin (1994) raised the question as to whether there has been some kind of failure or oversight on the part of educators to create and stimulate a learning environment or activate intrinsic motivation. He noted that the non-physical aspect of our existence is a critical element in the development of Black youth, and he outlined in his Talent Development Model the nine cultural dimensions that are significant to talent development. They include harmony, movement, verve, affect, expressive individualism, communalism, orality, and social time perspective and spirituality.

Additionally, and in a focused group session held with the boys (Bermuda College, 2016), it was revealed that one of the biggest challenges for the boys was returning to high school on their scheduled days – Monday and Fridays. Upon doing so, they had to wear their school uniform. For the most part, they openly stated that it seemed as if they had lost their freedom and were not allowed to freely express their ideas and feelings. Another comment expressed by the boys is that they better understood the instruction from the teachers at the College. These comments were shared with the College instructors and senior school counselors.

Continued funding to the Applied Technology Certificate Programme is absolutely necessary moving forward, particularly since the Bermuda College has adapted to do with less since 2010 (Bell, 2016) and perhaps, more importantly, technology education is needed in Bermuda's public schools (Lagan, 2017). Furthermore, it is expected that the boys currently enrolled in the programme will continue to be inspired and demonstrate academic proficiency needed to obtain both the Applied Technology Certificate and the BSD certifications upon graduation.

Intentions are already underway to expand the programme to embrace another public school senior cohort that will hopefully consist of both males and females. On the grander scale, technical education must be of high priority, and the development of a Career Technical Academy with recruitment for the institution beginning as early as seventh grade (M2) would be an excellent start.

### Conclusion

The current job market data dictate that Bermuda invests substantially in career and technical education. The decision to heavily reinvest in this neglected area of study cannot and must not be left up to the Government alone, because industry partners and other stakeholders will also benefit from the investment. Of course, such an investment requires funding, internships, apprenticeships, and mentoring programmes to ensure that the spirits of young black boys are not broken but are instead enhanced to reach their innate potential.

#### References

Baker, A. (2013). President Obama Pushes Education Agenda at Brooklyn High School.

NewYorkTimes. Retrieved December 14, 2016 http://www.nytimes.com/

Bell, J. (2016). Future Bright for Technology Learning. The Royal Gazette.

September 14th 2016 http://www.theroyalgazette.com . Retrieved April 23, 2018.

Bermuda Job Market Employment Briefs (June 2015).

Boykin, A. W. (1994). Harvesting Talent and Culture: African- American Children and Educational Reform. Robert J. Rossi ed. Schools and Students at Risk. Context and Framework for Positive Change. New York: Teachers College Press, pp. 116-128.

Christopher, J. T. (2009). A Random Walk Through the Forest Reflections on the History of Education in Bermuda From the Middle of the 20th Century. Winnipeg: Hignell's Printing.

Cotner, H. & D. Folkers (2012). The Career Pathways Effect: An Introduction, Linking Education and Economic Prosperity. A Joint Publication of the Center for Occupational Research and Development (CORD) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), Published in Dallas, Texas.

Focused Group Session (2016). Students in Applied Technology Certificate Programme, Bermuda College. December 8, 2016.

Harvard Graduate School of Education Report on Technical Education (2011). *Pathways to Prosperity: Meeting the Challenge of PreparingYoung Americans for the 21st Century*. Harvard University: Cambridge, Massachusetts, pp.1-44

Johnson, A. (2003). Technical Educational Gaps Hurt Black Males. *The Royal Gazette* April 9, 2003 and updated February 4th 2011. http://www.the royalgazette.com Retrieved January 15th 2017

Kunjufu, J. (1989). A Talk With Jawanza: Critical Issues in Educating African American Youth. *African American Images*. Chicago, Illinois.

Lagan, S. (2017). Senator Stresses Importance of Technology Education. *The Royal Gazette*. September 21st Retrieved, April 10th 2018 http://www.theroyalgazette.com

Mincy, R. B. (2007). A Study of Employment, Earnings and Educational Attainment Gaps betweenYoung Black Bermudians Males and their Same Age Peers. Hamilton: Columbia University, School of Social Work.

- Online education glossary. (http://edglossary.org/career-and-technical education)Retrieved January 19th 2017
- Student Management System. Bermuda Department of Education. Retrieved October 2016

The Department of Education, Student Management System (2016). *Department of Curriculum & Assessment School Data*, St. George's, Bermuda.

The Royal Gazette (2018). Scholarships to help students in need. http://www.the royalgazette.com Retrieved March 16, 2018

Williams, D. J. (1964). Director of Education: Report on Education in the Colony. Hamilton, Bermuda.

### Appendix

Applied Technology Certificate Programme Student Survey Questionnaire

This survey questionnaire is designed to obtain information about how students in the Applied Technology Certificate Programme are adjusting to the programme at the Bermuda College.

Kindly circle 'Yes' or 'No' to the questions below.

1.	Are you enjoying classes at the Bermuda College?	Yes	No
2.	Do you like the College environment?	Yes	No
3.	Do you believe you will graduate with your high school diploma?	Yes	No
4.	Do you believe you are capable of receiving the Applied To Certificate at the programme?	echnical Yes	No
5.	Do you feel inspired about learning?	Yes	No

6. If, yes why? If no, why not? You can write your answer on the lines below.