VOICES IN EDUCATION

A Bermuda College Publication

Volume 4 • August 2018

Student Success: A National Focus

Published by
Bermuda College

Published by Bermuda College
PO Box HM 2718
Hamilton HM LX
Bermuda
Tel: 441-236-9000
www.college.bm

ISSN: 2059-0695

Annual Subscription Rates
Individual: US$40.00
Institutional: US$65.00

Co-Editor: Phyllis Curtis-Tweed, PhD
Co-Editor: Lynette Woods, PhD
Content Editor: Glenn Bascome, EdD
Managing Editor: Lynette Woods, PhD
Cover Design: Edwin Smith, PhD

Voices in Education is published once a year.
Printed in Bermuda by Bermuda Press Limited
Set in Perpetua.

Contents

Aims and Scope

Voices in Education is a scholarly journal that serves as a voice and resource for students, researchers, educators and the community. It contributes to the realisation of Bermuda College's vision by addressing "the diverse needs of the community through research."

The aim of this publication is to heighten awareness of current trends, to encourage discourse and practice, to challenge thinking, and to widen and strengthen the scope of research in education. *Voices in Education* serves local and global audiences in academia by providing peer-reviewed, multidisciplinary articles.

Editorial Board

Bermuda College
Publication Committee

Foreword

Phyllis Curtis-Tweed
Lynette Woods
Co-Editors

The theme for the fourth edition of *Voice in Education* is Technical Education: Past, Present, and Future. Technical education, 1951-1969, contributed significantly to the positive development of male students. This is a particularly important topic for Bermuda because the replication of technical education's impact, focusing on black males of today and tomorrow, has been called for across various sectors of society, including education and government.

Most of the articles focus on the implementation and impact of the Bermuda Technical Institute (BTI), 1951-1969. The journey begins by reviewing the history of technical education in Bermuda through the lens of newspaper and government reports that chronicled the life of the school from development to demise. Ebbin concludes that the Bermuda Technical Institute had a significant impact on education in its 13-year duration and implies that its replication is still a topic of debate.

Following this article, Wasi, a graduate of Bermuda Technical Institute (BTI), provides a poignant personal testimony about the impact of BTI on his life and career. He highlights those aspects of the school that made it unique and produced confident graduates who excelled in their areas of training. At the end of his article, Wasi calls for the re-establishment of technical education which he believes is critical to Bermuda's self-sustainability.

Tankard picks up the importance of the technical education theme relative to the positive educational attainment of black males. He describes the rebirth of technical education in the new applied technology programme at Bermuda College. This successful dual enrolment programme affords high school students an opportunity to improve their educational attainment in high school, while simultaneously earning college certification. Tankard concludes that government, industry partners, and other stakeholders should invest substantially in technical education.

Selassie places technical education in a global historical context and describes industrial development and technical education in Bermuda from the early nineteenth century to the present day. He describes efforts of the Bermudian government to revive technical training through workforce development. Selassie emphasises the need for sustained collaborative partnerships between government entities and community partners to advance technical training and occupations.

The final article illustrates the global importance of technical training to the self-sustainability of women in Nigeria. Babalola describes women empowerment programmes which were used to teach vocations. In this instance, the Nigerian government collaborated with international partners with the goal of effecting improved welfare for women and their families. She concludes that the programmes should be extended and that the women need to be more inclusive in programme planning. She suggests that the programme be reorganised into a department of adult and non-formal education, similar to technical education and workforce development.

This volume of *Voice in Education* relays the history of technical education in Bermuda and relates the importance of technical education regarding societal and community needs. The articles have also referenced possibilities in programme development in Bermuda and in Nigeria to illustrate the global importance of this topic. The articles cause us to reflect on the past, to consider our present, and to project future possibilities. All articles point to the importance of technical education as both a means of providing viable career pathways, encouraging productive citizenship, and fostering self-sustainability.

Editorial

History of Bermuda Technical Institute

Meredith Ebbin

Preface

The following article outlines the history of Bermuda Technical Institute's beginnings in 1951 to its closing in 1969. The information is largely derived from newspaper accounts and government reports of the time.

1951-1958

On Monday, September 17, 1956, 86 boys, black and white, began classes in a £65,000 brand-new building, constructed by black Bermudian contractor Henry Talbot Sr. on a 16-acre site at Prospect, Devonshire, which Government had purchased in 1949. For all its significance, both socially and educationally, the Bermuda Technical Institute opened with surprisingly little fanfare.

That the school was integrated was noteworthy as only two years earlier, a parliamentary interracial committee had recommended that school segregation remain in place. Media reports, however, left no doubt that the school was a departure from the norm. The front-page sub-head of the February 12, 1956 Sunday edition of *The Royal Gazette* said: "It will Open to Boys Of Both Races—First of Its Kind in Colony" (p. 1), while the *Bermuda Recorder's* September 22, 1956 edition carried the headline, "Opening of Bermuda Technical School Most Significant Educational Venture" (p. 1).

The *Recorder's* (1956) article also told how headmaster Frank Dearnley took its reporter on a tour of the "newly constructed building on a site which commands a panoramic view of most of Bermuda from atop Prospect Hill." The school's workshops "had some of the finest equipment available," the *Recorder* continued, and the aim of the school "was to produce a stream of well qualified young men capable of obtaining and holding posts of importance in the industrial and commercial life of the community" (p. 1).

Headmaster Dearnley also stressed that "the wide training and academic standard of the school should not be confused with the work of a mere trade school." The school aspired to train boys "capable of filling future managerial and executive positions, and not just producing technically competent craftsmen" (*The Recorder, 1956*, p. 1).

The Technical Institute was established as a replacement for the apprenticeship school at the Dockyard, which had produced hundreds of highly skilled tradesmen, black and white. The closure of H.M. Dockyard in March 1951 after 200 years in Bermuda left a sizeable gap in trades training.

The Director of Education's report (1953) stated: "Since the closing a few years ago of H.M. Dockyard, where an excellent system of apprenticeship was in force, no facilities for technical education have been available. It is, however, proposed to provide a technical school for boys as soon as possible. A site for the school was purchased several years ago and plans for the first section of the building are in the course of preparation by the Public Works Department" (p. 19, Item 29). Architectural drawings for the school were approved by Parliament in May 1955 and construction began the same month. Contractor Talbot told *The Royal Gazette* (May 1955) that while he had been given a year to complete the project, if the weather were favourable, he expected it would be completed in eight months (p. 1). According to the drawings that were released to the public (*The Royal Gazette*, May 1955), the school building would be of two storeys and of traditional Bermudian architecture (p. 1).

Headmaster Dearnley, who was recruited from the United Kingdom, arrived in Bermuda in April 1955 to assist with matters relating to staffing, curriculum, and equipping the school. New Director of Education D.J. Williams, writing

in the Board of Education's report (1956), said that the first set of students were aged between 11 and 14. There were two streams (p. 8, Item 22). "It was decided," he wrote, "to restrict the full five years' course to the 22 who qualified through tests in intelligence and attainment and to include the remaining 64 applicants in a three years' trades course" (p. 6, Item 20).

Like the student body, the teaching staff was integrated. Assistant teachers were Sidney Rumbelow and Kenneth Clegg, both from the United Kingdom, Edward Smith from Jamaica, and Bermudians Arnold Usher, a master carpenter and boat builder, and Alma 'Champ' Hunt.

Tech experienced its first major setback the first year with the resignation of headmaster Dearnley because of ill health. He was replaced in August 1957 by Edward Crawford, also from the U.K., who would be headmaster for the next 13 years. Both Dearnley and Crawford had extensive experience in technical education.

The school's curriculum was a mix of academic subjects such as English, mathematics and science, along with technical and trades courses. The Director of Education's report (1957) said courses in general education were "supplemented by courses in woodwork and metalwork for pupils in their first two years, while it is intended that training offered in the subsequent years of the courses should be concentrated on building trades and light engineering." That year the school instituted a programme of evening extension classes "to fill a long-standing gap in our system" (p. 15).

Mr. Williams also wrote that proposed additions to the school were completed and when more parents [recognised] the value of education at the Institute, the school will assume an important place in the educational system. Students had the opportunity to sit United Kingdom administered exams, General Certificate of Education 'O' levels, and City and Guilds.

The Institute was a fee-paying school like all high schools during that era. Only primary schooling was free for students ages 7 to 13. The Institute's fees were £9 per term. As with other high schools, Government offered a number of annual scholarships. The Institute, however, was not without its teething pains. In the Director's 1958 report, the administration seemed to be struggling with attempts to match the curriculum with the needs of industry but, by the following year, the matter appeared to be resolved.

According to the Director's Report (1959), "The Technical Institute has now been in existence for four years. An evaluation of its place in the Colony's educational system confirms the opinion that it should reflect the needs of the community, functioning as a technical high school for the smaller stream of selected pupils and making available pre-vocational courses for the larger group from whom skilled craftsmen should be drawn" (p. 8, Item 24).

1961-1969

Williams (1961) expressed concern in his report about low student numbers in the technical stream. He wrote: "The number of applicants for admission for the 'technical' stream continued to be very small. No matter how comprehensive the provision of staff and facilities, no substantial progress will be made unless the calibre of the pupils can be sharply raised" (p. 12, Item 25).

The curriculum was reworked that year and greater emphasis was placed "on the necessity for closer liaison with local industry and conditions of employment." Williams also noted that the outlook for the 'trades' stream was made more realistic by the increase in time given to practical work and by the undertaking of site work in the form of a new building for the school's use (p. 12, Item 25).

By 1963, things were looking up. The Director's report for that year described how the school was fast "assuming a role specifically suited to the Colony's needs." It was a high school with a 'technical bias' for day students, a junior technical school for its day-release apprentices, and a technical college and an adult institute for evening students. Its operations were overseen by a governing body which was sensitive to the need for cooperation with local industry as well as the Board of Education. Significantly, Williams wrote that the school was not "beset with the problems of segregation as its students feel a strong common purpose in its curriculum of studies" (p. 24, Item 45).

As Tech's board, headmaster, and staff got to grips with its curriculum, Bermuda was being upended by political winds. The 1959 Theatre Boycott had dealt a fatal blow to segregation. Activists then turned their attention to the abolition of the property vote, with the result that the 1963 general election saw adults who were not property owners voting for the first time in Bermuda's history. In 1963 as well, Bermuda's first political party, the Progressive Labour Party, was formed. In 1962, Warwick Academy became the first of the traditionally all-white schools to change its segregationist policies (Warwick Academy Website, 2018, *Our History)*.

Meanwhile Government commissioned an education report. The Houghton report (1963) recommended widespread changes to the education system, including desegregation and raising the school-leaving age. Significantly, Commissioner Harold Houghton excluded technical and vocational training from his review, because of his 'inadequate knowledge' of 'a highly specialised field.' However, he added: ". . .so far as I could observe, the Bermuda Technical Institute is already doing very good work and can reasonably be expected to develop on sound lines without any interference from me" (Houghton Report, 1963, Introduction). He also noted that both Tech and the Hotel School, which had opened in 1961, "have white and coloured students, with apparently no complications resulting from that integration" (Houghton Report, 1963, p. 2).

Changes adopted in the wake of the Houghton review included the raising of the school leaving age to 14 from 1965, to 16 from 1969, and the abolition of segregated schools. New schools were built to accommodate the increase in numbers of high school students. The school system was reorganised into three zones, with primary students required to choose a school in the zone closest to their place of residence (Education in Bermuda – The Board of Education's Report and Recommendations, 1964). The Institute for its part continued to tweak its curriculum, placing a greater emphasis on trades training along the lines of the Dockyard apprenticeship scheme.

In a *Bermuda Sun* (1967, Dec 2) column, based on an interview he had conducted with Edward Crawford, Victor Scott, the retired and highly respected headmaster of Central School, said that the number of students in the Institute's high school had risen to 228 since 1956. Crawford (1967) noted that the enrolment could have been much larger 'if the authorities had so desired' because out of 200 boys applying for admission for that September, there were places available for only 64 boys (Section 3, p. 9).

Of the 27 students who sat for 'O' level exams the previous year, there were 48 passes out of 89 papers submitted, with 15 earning distinction. There was also an 85 per cent pass rate in the industrial examinations, which were similar to the first year of City and Guilds. Upon leaving high school, Tech students had no difficulty finding employment. Crawford (1967) indicated that the ready reception given to the technical school boys by business firms testifies to the satisfactory nature of the training given at the school. "Despite this, there are people in the community who would like to see the programme of the technical school modified in one way or the other. For instance, there are those who would like to see the school concentrate on turning out tradesman, that is to say, carpenters, masons, etc., as they contend that Bermuda is not turning out the type of skilled tradesmen it once used to produce. On the other hand, there are those would like to see one or two more academic subjects added to the curriculum, notably chemistry, which was dropped recently, and a foreign language" (*The Bermuda Sun,* Section 3, p. 9).

Responding in the same column (*The Bermuda Sun*, 1967), Mr. Crawford said, "We consider that the subjects taught here are the essential ones for a school of this type. Purely cultural subjects, such as French, art and music, if desired, must be studied in the boys' spare time. As it is, students in the fifth form have to spend additional hours outside the official day in order to complete the work" (Section 3, p. 9). Headmaster Scott, who had taught at the Institute in 1963, pointed out the unique characteristics of the school and also noted that seven Tech graduates who had recently completed their training in England were now "fully qualified technicians." His conclusion indicated that the school was playing an important part in the educational system of the colony. As well, "In addition to the basic education and industrial introductions, the school also gives valuable training in citizenship and the development of character" (*The Bermuda Sun,* 1967, Section 3, p. 9).

Scott (1967) further noted in his column that organising a programme of work required to meet the needs of the differing categories and ages must certainly "tax the ingenuity and skill of the principal and members of his staff to the

fullest extent" (*The Bermuda Sun*, Section 3, p. 9). Giving a tally of student numbers, he said there were 228 full-time high school students, 140 day release students, who attend classes for one full day and one evening, and 480 in further education classes. Although not mentioned in V.F. Scott's column, it should be indicated that physical education was part of the curriculum and students participated in and won prizes in the annual inter-school sports competition, featuring track and field. They also played football and at one point rugby. Their float entries in the annual Floral Pageant were prize winners two years in a row.

In an interview with Headmaster Crawford, *The Royal Gazette* (1968, February 3) reported that student numbers had risen to more than 1000, the highest ever. The largest numbers were enrolled in English and mathematics classes, which vary from elementary to GCE 'A' level. Subjects were added and dropped depending on demand. The latest demand for day refrigeration classes and a new building was being completed to accommodate that demand. Day classes would also be instituted for welders and radio technicians. He said the school had 16 full-time teachers and 27 part-time ones, taught 71 classes a week, and was open for 12 and a half hours from Monday to Friday (p. 4).

On September 3, the *Gazette (1968)* reported that the school was adding three classrooms to cope with increasing demand. Despite that expansion, changes were in the works, which elicited little public comment. The Director of Education's Report (1967) noted that Tech's proposed development as an essential part of a further education complex at Prospect-in conjunction with the Hotel College and the Sixth Form Centre-will necessitate the phasing out of boys of secondary school age from 1969. From 1969, the Institute's enrolment would come from all secondary schools and its staff will be shared with its two fellow institutions (p. 2).

The Sixth Form Centre for 'A' Level studies had been established following desegregation to serve the Island's academic high schools. It opened in 1967.

Headmaster Crawford (1969, February 27) spoke about the coming changes at the annual ceremony, where students recceived their certificates. Edward Crawford eschewed the word graduation. His comments, carried in the *Gazette* the following day, said that 500 boys had passed through the high school since 1956, and around 2,000 had gone through the evening schools. He revealed that the Institute's programme would come to an end in July as technical education would shift from high school to the college level. The headmaster called it a 'brave experiment' with many imponderables and no doubt heartaches. Until the secondary school phases out in four years, more and more older students will be accepted for training and education according to their desires (p. 5). When he retired the following year, he left no doubt as to how he felt about the closure.

1970-1975

While not opposed to a technical college, Crawford (1970, May 30) told the *Bermuda Sun*: "My contention all along (and there are many others who feel this way) is that it is a pity that this school should be closed down. It is distressing that a school in going order, which it was, should be closed down. We supplied a need or the children wouldn't have found jobs. It will be another two or three years before there will be a replacement for this school" (Section 2, p. 3).

There were no Director of Education reports published for the years 1968 through 1973. However, a report of the 1974-1975 year, produced by the newly-established Ministry of Education, noted the establishment of the Bermuda College, comprising the Academic Sixth Form Centre, the Hotel College, and Department of Commerce and Technology, which included tech education and secretarial courses, such as typing and shorthand.

The Ministry of Education Report (1974-1975) described changes to the Department of Commerce and Technology as "far reaching. New advanced courses were introduced – the standards of courses and prerequisites for entry to all courses were raised. The course contents of technical and trades courses changed to meet Bermuda's requirements" (p. 20, Item 2).

The public record is silent on the reasons for the decision to switch tech education from high school to the college level. The Institute seemed to have been going at full speed and then suddenly, with no explanation, the plan to phase out the high school division was adopted. There was no documentation noted for the change.

Over the years, former students of the Bermuda Technical Institute have spoken about the contribution of the school and have made calls for it to be replicated. Whether that is a realistic option is debatable, but there is no doubt about the key role the Institute played in education during the 13 years it was in existence. In 1996, the Technical Institute and the Sixth Form Centre buildings were razed to make way for the new sports center, wiping out physical evidence of the school's existence (*The Royal Gazette,* 1996, pp. 1-3).

References

Bermuda Recorder (1957, February 23). Bermuda. p. 1.

Crawford, (1970, May 30). *Bermuda Sun,* Section 2, p. 3.

Director of Education's Report (1953). Bermuda, p. 19, Item 39.

Director of Education's Report (1955). Bermuda, p. 8, Item 22.

Director of Education's Report (1957). Bermuda. p. 15.

Director of Education's Report (1969). Bermuda, p. 2.

Education in Bermuda – The Board of Education's Report and Recommendations (1964). Bermuda. p. *2* .

Houghton, H. (1963). *Report on the Educational System in Bermuda.* Bermuda.

Ministry of Education's Report (1974-1975). p. 20, Item 2.

Opening of Bermuda Technical School Most Significant Educational Venture. (1956, September 22). *The Bermuda Recorder.*

Scott, V. (1967). Interview with Edward Crawford. *The Bermuda Sun,* 1967, December 2. Section 3, p. 9.

Smith, B. (1954, May 23). *The Royal Gazette,* p. 1.

Smith, B. (1956, February 12). It Will Open to Boys of Both Races-First of Its Kind in Colony. *The Royal Gazette,* p. 1).

Success Story: Over 1000 Students (1968, February 3).Interview with Headmaster Crawford. *The Royal Gazette,* p. 4.

The Royal Gazette (1955, May 8). p. 1.

The Royal Gazette (1969, February 28). p. 5.

The Royal Gazette (1996, November 15). pp 1-3.

Warwick Academy Website (2018). *Our History.*

Williams, D.J. (1956). *Director of Education's Report.* p. 6, Item 20.

Williams, D.J. (1961). *Director of Education's Report.* p. 12, Item 25.

Williams, D.J. (1963). *Director of Education's Report.* p. 24, Item 45.

My Alma Mater: The Bermuda Technical Institute

Khalid Abdul Wasi

Introduction

This article reflects my personal experience as a student attending the Bermuda Technical Institute (BTI) from 1964 to 1968 and shows, ultimately, how the school was beneficial to society in the way it shaped the careers of persons like me. The information in this narrative is not only my experience but is inclusive of conversations with Bermuda Technical Institute Alumni, direct conversations with MCP Albert Nicholl's family, and some research that was extracted about Nicholl in *The Royal Gazette and Colonist Daily* (1941, June 2). It also includes what I learned about BTIs formation and unfortunate demise. Most of the information consists of personal recollections. Not all references are supported.

The history of Bermuda Technical Institute (BTI) has raised debates on radio talk shows, barbershop conversations and, at times, discussed vigourously across the floor of parliament to either dramatise proof of racism and former political postures or, more positively, as indicators for what needs to be done with our educational system. The article also highlights the BTIs purpose in maintaining the technology and apparatus that sustained the island for many years by training Bermudian technicians.

Personal Experiences

I was in standard five at the end of the 1963 school year, a transitional year in education. Prior to this year, there were six standards for primary education before enrolling in high school. So for my elementary school graduation year, both the fifth and the sixth standard students were entering high school at the same time. I chose the high school I wished to attend.

I made a significant choice after satisfying questions that were important to me: Which school won the inter-school sports (track and field)? The answer was Bermuda Technical Institute. Equally important was who won the football competition. The answer was Bermuda Technical Institute (BTI). I didn't really know much more about the BTI prior, except that one of my brothers had attended the school. I do recall him playing with his school team in a night soccer match against the bus drivers. However, the fact that he went to England and became an optical technician I could not appreciate until after I had finished school, but the football stood out. Nevertheless after gaining answers to the above questions, I was determined to go to the Bermuda Technical Institute.

Transitioning from elementary school to the BTI was, upon reflection, good because the students that came before me had an order and respect for discipline that had become ingrained and was part of the culture by the time I attended. Aside from sports, many students had a keenness and aptitude to learn.

However, the huge experiential adjustment was with the teachers, who were not the motherly or nurturing type as I had experienced in elementary school. At the Ord Road School where there was one male, the headmaster and the chief disciplinarian, all the teachers were female. In contrast, at the BTI, starting from the principal, there were mostly male teachers and two female teachers. Between these two schools, there was quite a personality contrast in teachers, from the quiet disciplinary type who said, "I hear noise" and expected compliance, to the fiery disposition of teachers who demanded silence. Each of the teachers held their own reputation as disciplinarians.

The BTI teachers enforced their discipline and set examples. The school complied and functioned in some ways similar to a military academy as a highly disciplined institution of learning. At times, when you walked the corridors,

you only heard the teachers' voices or the noise of the students' pens scratching on the papers. We often hear our BTI alums talk admirably about 'Tech' as a school that was disciplined. Truthfully, the term disciplined is a euphemism to colour the reality that enforced that discipline, which is too often disregarded or not adequately told.

Rigid discipline was the nature of teaching in British institutions. It was done, not so much to intimidate or out of hatred, but it was a culture of English and European teaching that aside from demanding excellence, held an extremely authoritative role for teachers over pupils. The methods used although harsh, in hindsight, if you survived, created toughness and a military attitude of preparedness towards a task.

Given the dangerous industrial equipment we used at the BTI, along with the fact that there were no injuries, is a positive testimony to the rigid discipline in the workplace practiced at school. They were not overly generous with their marking system either. Students worked very hard to attain a C and, if you managed to get a C+, B, or A, you truly earned it. I recall starting in the first form with two classes combined totaling 44 students, but that number dwindled to only 27 five years later in the graduating year.

The teaching methods and subject matter were formative and in many ways holistic and, to me, somewhat reminiscent of the teachings of the renaissance era when privileged young boys were placed with masters to be trained. Imagine an 11-year-old being taught technical drawing. By the time they got to 13, they could do a cross-section through an engine and put it in a three-dimensional drawing. Imagine learning from that young age how metal is made from melting rock and extracting from its ore red-hot flowing fluids of metal that is cooled and shaped. Also conceive getting on a lathe and making your own bolts and nuts and your own tools by the age of 14. Then imagine being taught math and physics at a commensurate level with the technology and technical training.

It was important to understand that this training caused the students in an experiential way to think about what they were doing. It was not an exercise of memorisation. The BTI was not producing parrots. It was creating young men who were trained to dissect and think with a comprehensive understanding of technology and science, a characteristic that followed them through life.

Students made a coat hanger out of a piece of wire and items like a metal spoon by cutting a piece from a plain sheet of metal and beating it into form for their first piece of work. The BTI captured the essence of technology to transform natural raw material into something useful.

The school created technicians using the perfect hand, body, and mind combination. After graduating from the technical institute, the students left with an ability to turn their chosen craft into an art form. They were not tradesmen when they left school, but had the prerequisite to becoming master trades persons within a relatively short time thereafter. For example, at the age of 18, I was able to do the layouts for the Melborne Building in Hamilton, setting out the stairs, walls, and lintels unsupervised. Not surprisingly, I became a full general contractor with a crew of a dozen tradesmen by the age of 23, building houses and, at the age of 28, a four-storey building in the City of Hamilton.

The idea of producing competent technical students did not begin in 1956 with the BTI School. There were attempts to address the need to provide technical training as far back as the early part of the 20th century. At the Central School, Mr. Victor Scott, an early pioneer, opened a facility at the Central School in the early 1930s that taught boys carpentry. A decade later in 1941, one of his former students expanded that effort to the West End Primary School where, under a tin roof, they taught many young boys. Over 1000 young black students went through the manual training programme between both school sites (*The Royal Gazette*, 1941, June 2).

Formation of the Bermuda Technical Institute

The intellectual divide considered manual or technical education as inferior. That notion was challenged with the thought that combining manual with academic actually increased the overall capacity and even worth of an individual. There is plenty of evidence for this when considering the inventiveness and creativity of many of

the renowned genius in global histories like Leonardo daVinci and others who were essentially trades persons or artisans.

In 1941 there was also the historic placing of the cornerstone of the Nicholl Institute, for what was billed then as a new phase in education for Bermuda. MCP Albert Nicholls donated 10,000 pounds to its creation (*The Royal Gazette and Colonist Daily,* 1941, June 2, p. 3). There were several speakers at this event, which was by all accounts an auspicious occasion attended by many parliamentarians and members of the board of education. MCP Nicholls, among others, was one of the principal speakers at the occasion. His speech laid out the aims of the manual training school. In his speech, he also recognised the wholeness of manual and technical training for young boys and spoke of the purpose of producing people capable of running businesses and becoming merchants. He likewise mentioned that there were enough rich persons on the island and that the development of the much needed manual or technical education school in Bermuda need not be dependent as a government venture (*The Royal Gazette and Colonist Daily,* 1941, June 2, p. 3).

The rationale for the creation of a more upscale manual training school like the Nicholl Institute is underpinned by pre-WW2 along with technological development. Sadly, given the Nicholl Institute was an all-white school, its overall effectiveness in addressing the island-wide demands was limited. The only other trade school, aside from the Dockyard for manual training, was the ill-equipped facility at Central School which only addressed primary school children.

Segregation at the time was an obstacle to creating an adequately funded technical training center without duplication that could produce enough budding technicians to satisfy Bermuda's growing market. The deficit in Bermuda for adequately trained Bermudian technicians caused a demand for a pragmatic solution to create a fully integrated school many years before segregation within the general society had ended. This underscored why the Bermuda Technical Institute (BTI) was both considered and needed. The school was formed over a decade or so after the Nicholl Institute in September of 1956 as the first fully integrated school with 57 students. Three months later in January 1957 another 55 students enrolled in the school. They were the first year and founding students of BTI .

The significance and the challenge of opening an integrated school in segregated Bermuda must be underscored. Bermuda had two unions each representing the separate races. The Bermuda Union of Teachers (BUT) which represented the black teachers formed around 1919 and was the first union to be established in Bermuda. The BUT became officially registered in 1947, as explained to me by Mr. Colin Benbow, one of its founders. In spite of a recommendation by one white teacher to join the BUT, the Teachers Association of Bermuda (TAB) was formed and registered a year later in 1948 as a union that represented the white teachers.

It is important to note that, in spite of their separation, both unions began to cooperate in the latter 1950's under the umbrella of the Joint Union Salaries Committee (JUSC) which is evidence that teachers were trying to bridge the gap prior to the formal end of segregation.

Both unions came together under what was known as the ABUT or Amalgamated Union of Teachers in the 1960's. It is important to note that the BTI would be a school with a mixed faculty congenially working together as early as 1956.

There have been no surveys to illustrate how the students fared as an integration experience. I could only relay information based on my own observation. It would appear that the racial attitudes between the students mirrored the society and, for the most part, the relationship between the black and white students was amicable. Those attitudes and behaviours were better in the school's earlier years and only eroded slightly towards the end as the issue of black power and political movements began to affect all the island's student populations.

Part of the unused funds left over from MCP Nicholl's generosity provided some of the seed money for the Bermuda Technical Institute. In his speech at the laying of the cornerstone of the Nicholl Institute, he lamented the fact that

the Nicholl Institute was going to be used only for white students and made a commitment in that same speech that he would assist the 'colored' children later on (*The Royal Gazette and Colonist Daily*, 1941, June 2, p. 3).

The land in the Prospect area was approved by the government for the creation of the school and, in 1956, the school was opened to its first students. Unlike its predecessor, the Nicholl Institute, the school opened without fanfare: no speeches by parliamentarians or auspicious dignitaries. There was scarcely a whimper of recognition. Notwithstanding, within a very short period, what was missed in celebration, was compensated by performance. The school and students began to galvanise around an identity, which saw them excel in every area. This fact was affirmed in conversations with many of the founding Alumni and in my own experiences at Bermuda Technical Institute (BTI).

Industry persons were very much behind the development of the BTI; one only need to look at the composition of the board of directors and see that it consisted of the captains of the various fields of industry.

- Mr. Vincent Lee a black architect whose name would be behind many of the designs of some major sports clubs
- Sir David Gibbons owner of a car dealership
- Sir John Plowman also owner of an automobile dealership and garage
- Sir Richard Gorham owner of a lumberyard and major carpenter shop
- Mr. John Burland who owned the island's largest construction company and adjoining carpenter shop (*The Royal Gazette and Colonist Daily*, 1941, June 2, p. 3)

Their vision would not have been realised without the principal and faculty of teachers who contributed to the school's success. Mr. Edward Crawford became the principal in January 1957 after Mr. Dernly who opened the school in September 1956 completed a three-month period. Mr. Crawford is described by former students as a silent warrior for the school and deserves, in my opinion, a lot of credit for its success. He was a philosopher who understood the value and association between trade, craftsmanship, and the development of civilisation. He fully understood that intellectual development was tied to our technological growth and awareness. Therefore, he valued the teaching experience that was preparing young men to take up the challenge as aspiring tradesmen to unleash their innate genius through mastering the world of technology.

All of the teachers were indeed masters in their own fields and brought textbook information and living experience with the trades to the classrooms. BTI alumni would attest that the success of the Bermuda Technical Institute was due to the caliber of teachers.

The school was formidable in sports and football as well as satisfying the market with well-rounded apprentices in all the trades. Because the school promoted mathematics and science, it was also producing the intellectual capacity for higher management personnel in the various fields of technology, including engineers, architects, and accountants.

By the mid to latter 1970s, almost every division of Bermuda's technical existence, whether it was the private sector like BELCO and TELCO, or the public sector for entities such as Works & Engineering or Marine & Ports, was led by a former BTI student. Although the school only lasted for 15 years, its influence spanned generations.

The Demise of the Bermuda Technical Institute

The Bermuda Technical Institute (BTI) lived up to its purpose and produced workers, tradesmen and businessmen, many of whom became leading entrepreneurs. The closure of the BTI was controversial. Many persons believed it was racially motivated. Former Premier Sir David Gibbons in a speech given at a BTI reunion at the old Bermudiana Hotel said nothing to dispel the issue of race. In that speech, he said that he did not personally support the schools

closing and relegated the issue of the BTI closure at the political environment of the late 1960's when in 1968 it was decided to wind down any further enrollment.

There have been many theories as to why a visibly successful school was closed. There are those who would say the success of the school was its own demise because it was not welcomed by those who feared it was producing too many qualified black businessmen. Then there are those who say the Board of Education had no appreciation for technical education and lobbied for the transformation of the school. There is also the conflated opinion that Sir David chose not to fight for its continuance while having the power over the board and the government. Instead, he acted as a 'Pontius Pilot' by letting the board of governors of the BTI be dissolved and thereby handing the school over to the Board of Education knowing they would close the school. We may never know the truth but, at some point, we may be able to research all the available material to gain a clearer understanding of the facts surrounding its closing.

Conclusion

Bermuda has suffered the loss of the Bermuda Technical Institute and its role in keeping an ample supply of local technicians to satisfy and keep pace with an ever-expanding world of technology. In a few decades Bermuda regressed in its technical deficit to what it experienced in the 1940s. We now are almost entirely dependent on foreign technicians. Our students are behind their contemporaries in Canada and the United Kingdom in their access to technical education.

Bermuda has a very sophisticated and diverse economy which depends on technology. While it may be unrealistic to expect the country to be fully self-sufficient, it is certainly possible at the very least to have many of its citizens engaged and even enhanced by the opportunities that technology demands. This, I believe, is what the Bermuda Technical Institute did for young men like me. It gave us the tools to comprehend and command the world of opportunities around us in fields that required technology and technicians.

The BTI is gone but the demand for the likeness of it within our current educational construct in order to keep Bermuda self-sustainable is visibly needed. It is up to this generation of business, government, and industry leaders to find the amalgam for this age of commerce and technology and determine how to move forward and address the need for training in all the technologies for the future.

The Bermuda Technical Institute (BTI) created confident men grounded in an education that was connected to experience and science. I always find comradery whenever I am confronted with a former tech student. This characteristic also exists in a working relationship with them because there will be a debate over processes and methodology on any assignment.

I was able to excel because of the foundation I received at the Bermuda Technical Institute. I can recall early in my career when I sought work from major construction companies. Their superintendents went to cabinets and handed over tacks of plans and told me to "Go for it." I also recall hardly ever seeing them again once they gave me the plans. In fact, on one occasion there was a sensitive decision, and I called the owner of this major construction company that night, and all he said was, "You can figure it out," and hung up. Such was the confidence that many industry persons had in many of the BTI students.

It was by no accident that many Bermuda Technical Institute students became captains of all the major institutions in Bermuda, and that same success would follow them wherever they worked in the world.That is history. Now we must examine where we are and look towards the future.

References

Manual training centre corner-stone laid: 'Symbolic' ceremony marks new era in education. (1941, June 2). *The Royal Gazette and Colonist Daily*, pp. 1, 3.

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, 20I6) 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

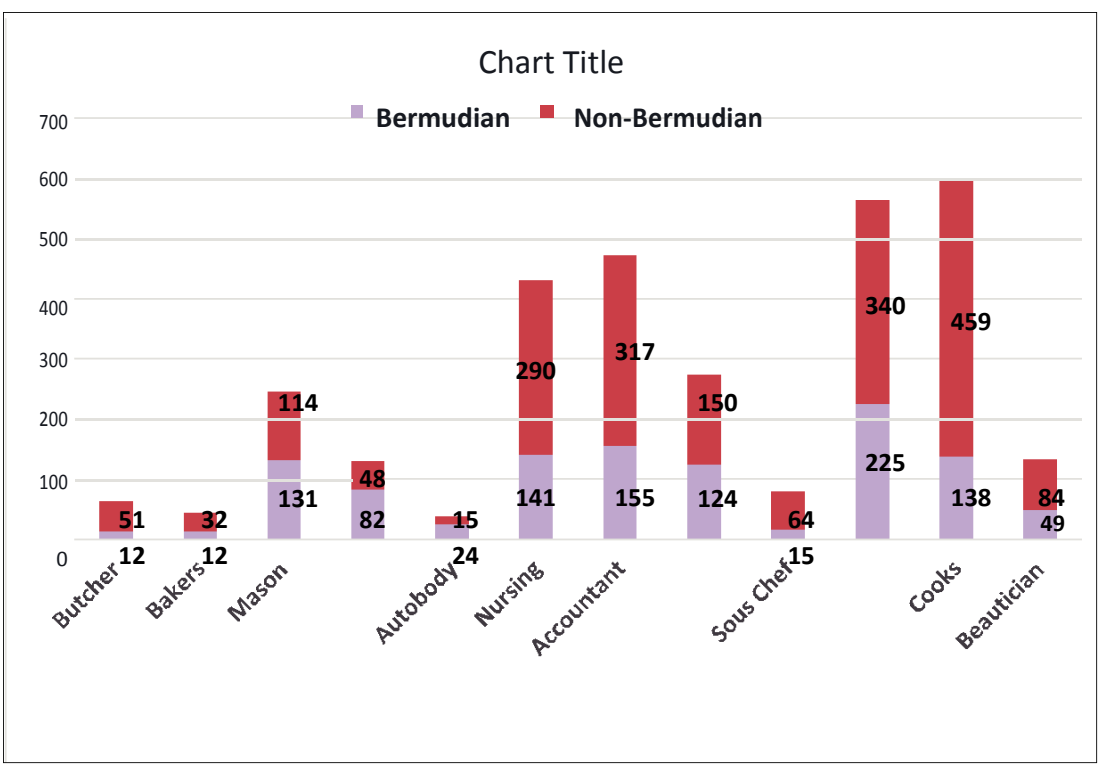

Figure one is representative of professions such as butchers, bakers, masons, auto mechanics and body-work mechanics, sous chefs, waiters/waitresses, cooks and beauticians. These are areas of job opportunities for Bermudians (Bermuda Job Market Employment Briefs June, 2015).

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 Technical Certificate at the programme? 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.

_____

_____

_____

_____

_____

Evolution of Workforce Development in Bermuda

Wolde Selassie

Abstract

This article reviews the historical development of technical education and how it impacted the cultural socio-consciousness of Bermuda. It discusses the social effects on the community after the first technical schools are closed and the revival of technical education in Bermuda.The article provides insight into the ideals that motivated the vision of a single governmental centre for technical training and career development. Understanding that technical education is at the forefront for supporting the socio-economic stability of our country, the challenge involved the coordination of national and international partnerships while employing a flexible vision for an efficient twenty-first century workforce.

KEY WORDS: *Sustainable, standardised,Workforce Development, trends, certification*

Background

Historically, Europe and western philosophy began its journey towards technology in the seventeenth century after Newtonic Physics developed a methodology for scientific investigations (Anderson and Hepburn, 2015). The new approach to understanding the material world gave birth to an innovative wave of technology. According to Gjerten (1986), the growth of empirical science affected every branch of mathematics and, consequently, the modern empirical philosophy facilitated an expediential growth in mechanisms. Correspondingly, Deane (1979) stated that the by-product of empirical science piloted industry and, routinely, the Industrial Revolution (1760 - 1840) advanced the economic development and productivity of Europe. The rise in industrialism established a totally different approach for supporting the populace. Training and specialisation became an integral component of economic growth and sustainability (Deane, 1979).

In essence, as European scholars of the day initiated the ideals of scientific materialism, theoretical knowledge began to produce mechanisms that ushered in a new era of social development. Systematically, the empirical methodology for acquiring knowledge advanced an industrialisation movement that stimulated socio-economic growth.

Industry in Bermuda

In 1809, Bermuda, as a British Colony, embraced the wave of industrial development. Harris (1997) affirmed that after Bermuda was identified as a viable naval defense location for the Western North Atlantic, plans were drawn to construct a navy station in the western part of the island. Stranack (1998) corresponded stating that during the year 1818, the construction of the Royal Navy Dockyard was commissioned to a contingent of Army officers and Royal Engineers. Once the project was launched, a company of local craftsmen and slaves were assigned to augment the labor force at the Dockyard. The assignment was very successful and, by the year 1823, the pool of workers at the Dockyard had completed a major phase of the project (Stranack, 1998).

However, there was a notable problem arising. Although the local contingent were very hard workers, they lacked the skills to successfully advance the project to meet the anticipated timelines. Hallett (1999) stressed that the majority of the local workers consisted of illiterate, unskilled laborers who were academically deficient and, thus, it was difficult for them to excel in the crafts being employed. To rectify the deficiencies, the officers and engineers devised short and long term plans to increase productivity.

Birth of Formal Technical Education

Beginning in 1849, a detailed programme was implemented to educate and advance the expertise of the locals. Regular school classes were implemented and all unskilled workers were mandated to attend tutorials (Hallett, 1999). By the year 1860, three schools were located at the Dockyard and technical education was being facilitated with standardised curricula. The participating workers were instructed in Mathematics, Political and Physical Geography, English Literature and Grammar, coupled with Physics and History. Moreover, Hallett (1999) submitted that the labourers were also privy to journals and periodicals on Astronomy, Botany, and Natural Science. The intense training facilities began to produce innovators in design and technology and the labour movement was excelling in productivity and expertise (Hallett 1999).

Consider that, during this era, the main form of transportation along the Bermuda shorelines was by boat. Arnell (1979) acceded that many local artisans were able to construct sleek vessels that navigated the shoreline in a safe and dependable manner. In addition to becoming master boat builders, the locals were proficient in the repair and maintenance of the larger shipping vessels that periodically visited Bermuda. Moreover, the larger ship captains depended on the native seamen for their expert piloting skills which were essential for the safe navigation of the local waters.

In 1951, the Royal Navy left its post at the Dockyard and, subsequently, the training facilities closed. Essentially, the participants in the Dockyard schools were educated with comprehensive curricula that was designed to inculcate critical thinking and problem solving skills within a technical based programme (Arnell, 1979).

Literacy and scientific knowledge became the linchpin to progressive developments and, subsequently, the vision and the mission of the Dockyard facilities produced a myriad of educated and skillful artisans.They systematically cultivated the local landscape with the historical buildings, bridges, and artifacts that are indigenous to Bermuda's unique culture.

Death of Technical Education

With the closure of the Dockyard programmes, the public-school curricula introduced technical education. The Bermuda Technical Institute (1956 – 1972), the first public school dedicated to absolute technical training, held to curricula that uniquely balanced kinesthetic hands on technical assignments that connected to substantive courses in Mathematics, Physics, Chemistry, and other sciences (Forbes, 2017).

The Bermuda Technical Institute was atypical and revolutionary because the leaders augmented the curricula with apprenticeship and training partnerships with local businesses as well as incorporated pathways to higher learning. Consequently, some of the graduates became educators and business leaders, and many became pioneers in telecommunications, electrical engineering, and civil engineering (Grimes, 1998). Unfortunately, the BTI campus was unceremoniously closed in 1972 (Forbes 2017).

To date, after BTI closed, a fully comprehensive technical curricula in public education has not existed. Students who readily engaged with technical based curricula were being deprived of the incentive to become life-long learners. The study directed by Mincy, Jethwan-Keyser, and Haldane (2009) emphasised that most young Bermudian males initially sought employment in the technical occupations. However, the local education system was not providing the knowledge and skills required for employment readiness. The Mincy et al., (2009) report states that, as a consequence, many young males did not view the school curricula as a viable tool for survival in the real world and, consequently, many were not inclined to achieve. The report inferred that the lack of preparation in schools can be directly linked to the growth of anti-social behaviours among young males. Businesses were forced to import qualified technicians while able-bodied young men remained idle.

Unemployment among the local male population was high during periods when technical services were in demand. The Mincy et al., (2009) report held that the labour shortages over the past two decades could be rectified with some

curricula that provided incentives for young males who were unwarrantedly disfranchised from the local workforce.

The Mincy Report indicated that technical training is a necessary pathway towards re-engaging young males in particular, and technical training is critical for the socio-economic stability of the community. The challenge for Bermuda was the revival of viable education programmes to invigorate the workforce with local talent. How will Bermuda develop educational initiatives to engage and stimulate excellence and pride in technical occupations?

Revival of Technical Training

On September 1, 1997, the National Training Board Act (1997) was legislated to answer the call for classifying, organising, and coordinating essential labour resources and local expertise. The primary focus of the NTB was to provide training opportunities for students as well as the re-training and certification of existing technicians. Three departments were established under the umbrella of the NTB: the National Training Board, the Career Development Section, and the Labor Relations Section. Each department was governed by specific Acts of Parliament, and each department was designed as a collaborative entity that worked as one cohesive organisation to meet all needs arising within the local workforce.

The National Training Board

Collaborating with local community partners and accredited overseas institutions, the Board provided training and assessment programmes that led to National certification. Local partners included the Bermuda College, the Senior Schools, and the Construction Association of Bermuda. Qualifications and certification were empowering for the community: partnerships with NCCER Training and Certification, City and Guilds Administrators, the Atlanta Technical College, and the New England Technical College. Many other accredited organisations were facilitated for interested persons who wished to pursue technical expertise. However, the defining role for the Board was National Certification. The Board's remit was to build a data-base of certified professionals to service all of the demands of local development.

Career Development

The Career Development section worked closely with the senior schools and community partners to deliver career guidance to students who may or may not seek university diplomas. This component provided community service and other initiatives that equipped participating students with real-life technical experiences. The Career Development section also offered guidance towards viable career goals with a mandate to prepare the existing and future labour force for employment readiness and career success.

Labour Relations

The Labour Relations section became the intervening entity for any breach of the Labour Act 1992 and/or the Employment Act 2000. To advise employees and employers on best practice according to Bermuda law became the focus of this section. Employees who were aggrieved by a breach of the afore-mentioned Acts were serviced by this department which provided mediation services for labour disputes and, if necessary, utilised its power of referral to the Human Relations Department or the Labour Tribunal if necessitated by the specifics of an ongoing disagreement. Under its remit, the Labour Relations section also regulated the certification or decertification of trade unions. The overall remit was to structure the employment relationships that uphold a safe and wholesome working environment.

Substantially, the National Training Board Act (1997) established career guidance and training for technical expertise. As Bermuda embraced globalisation with major construction projects and the influx of international business initiatives, National Certification became the tool for placing local professionals at the forefront for employment readiness. The challenge of building a data-base of certified professionals became paramount for the Bermuda government. What strategies will amalgamate our community stakeholders and propel the agenda to acquire international certification?

Future Trends

On December 18, 2011, legislation amended the NTB Act (1997) to establish the Department of Workforce Development (DWD). With a Vision and Mission to be the most prolific provider of labour services, the existing mandate of the DWD is to strengthen and sustain the economy by training, building, and coordinating an internationally accredited workforce. Utilising the expertise of the afore-mentioned departments of the National Training Board, the DWD is equipped as a cohesive synergy that will effectively reposition the local workforce. As the labour regulating arm of The Bermuda Government, the DWD is committed to career development and technical training while embracing a philosophy that transforms the local workforce into competitive certified professionals.

Training initiatives and accredited programmes are geared towards professionals and unskilled workers as well as the unemployed. The rationale is to ensure that the majority has the basic training and certification that advances employment at all levels of industry. To accommodate qualified technicians, the Department of Workforce Development has established a viable pathway to certification that consists of two categories.

Category One: Applicant has formal training at an accredited college/university.

Figure 1: Qualification Process for Formal Learning

Formal Learning	**Assessment**	**Validation**	**Certification**
Accredited study programme	At the end of the learning process	By the educational institution	Full qualification award or non-certification

Figure 1 is a straight forward process that requires documentation of completion from the accredited institution. National Certification is based on the diploma received from the school.

Category Two: Applicant has on- job experience and minimal formal classes.

Figure 2: Assessment of Non- formal Learning

Learning and personal activities on the job	**Assessment**	**Validation**	**Certification**
	Interview and portfolio. Oral questioning by panel	On job experience, related course work portfolio	Full qualification award, partial qualification, or non-certification

Assessment of non- formal Learning in figure 2 is a process that requires the individual to submit a detailed portfolio that includes pictures, documentation of formal courses, and employer or client references. An Industry Assessment Panel (IAP) interviews the applicant, reviews the portfolio and forms an assessment. Note: members of the IAP are fully accredited reputable professionals appointed by the Board for the sole purpose of assessing Category Two applicants.

The Department of Workforce Development recognises that technical training and certification is integral and essential to creating a socio-conscious community within a socio-economic paradigm that benefits all stakeholders. To meet this challenge, on May 16, 2014, the Ministry of Home Affairs unveiled its National Training Plan. The ten-year National Training Plan (2013) exists as a collaborative document designed by the government and the private sector with the directive to improve and sustain Bermuda with a competitive workforce. The Plan systematically studied past trends and outcomes of technical training and conflated the ideals with present training and assessments.

The rationale was to build a comprehensive model to transition the Bermuda workforce seamlessly into the twenty-

first century. The National Training Plan (2013) is projected to have specific measurable outcomes by the year 2023. The inclusive outcome will be a detailed database of professional human resources and efficient technical services that will sustain Bermuda with a globally competitive pool of labour expertise.

As a result of the hard work to date, the Department of Workforce Development has evolved to become the leader in providing services for employment readiness and career success in technical occupations. The department has awarded scholarships in National Technical Vocational Training (NTVT) and other trainee awards for studies at the Bermuda College or overseas universities (Burchall, 2016 and 2017).

Conclusion

Empirical science continues as the methodology that facilitates and stimulates education and socio-economic growth. Correspondingly, the Department of Workforce Development collaborates with the Ministry of Education and Community Partners to effectively create pathways for advancing Applied Science occupations. As the One Stop Centre for Bermuda, the Department of Workforce Development maintains its visionary mission to meet the challenges of the twenty-first century with the education, the training, and the assessments that shape an efficient and certified workforce. Bermudian technical expertise will continue to sustain our economy with procedures and processes that are comparable to global standards.

References

Anderson, H. and B. Hepburn (2015). Scientific Method. *The Stanford Encyclopedia of Philosophy* (Summer 2016 Edition), Edward N. Z. (ed.).

Arnell, J. (1979). *The Bermuda Maritime Museum and the Royal Navy Dockyard Bermuda.* 1:16 -20. The Bermuda Press Ltd.

Burchall, P. (2016, July 14) Workforce Development Scholarship Recipients. *Bernews*,

Retrieved from http://bernews.com/2016/07/md-workforce-development-2016-scholarship- recipients/ 2016.

Burchall, P. (2017, August 23) Workforce Development Scholarship Recipients. *Bernews*, Retrieved from http:// bernews.com/2017/08/workforce-development-scholarship-recipients/

Deane, P. M. (1979). *The First Industrial Revolution.* 1: 1-20. Cambridge University Press United Kingdom.

Forbes K. A. (2017). Bermuda's History from 1952 – 1999. Bermuda Online. Retrieved from http://www.bermuda-online.org/history1952-1999.htm

Gjertsen, D. (1986). *The Newton Handbook.* London, UK: Routledge. p. 149.

Grimes, C. (1998). *The Bermuda Technical Institute:The Rise and Fall.* The BTI Alumni 1998.

Hallet, H. (1999). *FortyYears of Convict Labor: Bermuda 1823 – 1863*. Chap.11: 98 - 101. Juniper Hill Press. Bermuda.

Harris, E. (1997). *The Defenses of the Bermuda Dockyard*. Post-Medieval Archaeology. Vol. 21, ISS. 1, 1987.

Mincy, R. B., M. Jethwan-Keyser, and E. Haldane (2009). A Study of Employment, Earnings, and Educational Gaps between Black Bermudian Males and their Peers. 5: 206 -208. University School of Social Work.

National Training Board Act 1997. Bermuda Law. Retrieved from Bermuda Law website:*http://www.bermudalaws.bm/Laws/Consolidated%20Laws /National%20Training%20Board%20Act%201997.pdf/*

National Training Plan 2013 -2023. Government of Bermuda Home Affairs. Retrieved from *http://www.parliament.bm/uploadedFiles/Content/Home/National%20Training%20Plan%20 %20M.%20Fahy.pdf*

Stranack, I. (1998). *The Story of the Royal Navy in Bermuda 1795 – 1975.* Chap. 1:8-12. The Island Press Ltd. Bermuda.

An Appraisal of Women Empowerment Programmes by Adult Education Departments in Two Local Government Areas in Osun State, Nigeria

Adejoke Clara Babalola

Abstract

This report is an assessment of the women empowerment programmes available in selected local government areas in Osun State, Nigeria and the involvement of women in the initiation and planning of the empowerment programmes.Two local government areas (LGAs) in Osun State, Ife Central and Ede South were purposively selected for the study.The participants in the study comprised 18 female beneficiaries of skills acquisition programmes selected through convenient sampling method from the two local government areas. Five officials of the adult education departments in the two selected LGAs were purposively selected making a total of twenty-three respondents. In-depth interviews were used to elicit information from the respondents.The study determined that women were not involved in the planning of the empowerment programme, and programmes were initiated and implemented based on needs assessment procedures that were not systematically undertaken. Unlike the Ede South who gave their participants the grants and loans promised, Ife Central was yet to do the same for the women that were involved in the programmes completed since year 2011.

KEY WORDS: *Women Empowerment, skills acquisition, initiation and planning*

Introduction

Despite increased government sponsored activities directed at the empowerment of women in Nigeria, observations show no real improvement in the lives of women in our communities (Featherstone, 2013). Some of the factors that contribute to the relegation of women to the background are socially prescribed gender roles, gender division of labour, and the fact that many women are unlettered in the Western sense (Ekong, 2010). As a result of these elements, women generally have relatively limited free time compared to men, limited access to information, capital, and other resources that could help ensure their economic independence and improve their bargaining power in the public and private spheres (Ekong, 2010; Opeke & Okwilagwe, 2000). It is not surprising, therefore, that they lack social, political, and economic power. Given these deficiencies, when decisions are to be taken in their communities that would affect them and their children, they are usually unable to take part in discussions that will lead to key decisions. The women's views are seldom heard or taken seriously when they are heard.

Realising the need for empowerment of the Nigerian women in general, successive governments in Nigeria, in collaboration with various international organisations like the World Bank, United Nations Development Programmes (UNDP), United Nations Children's Education Fund (UNICEF) and United Nations Industrial Programmes (UNIP), have initiated many programmes to meet the needs of Nigerian women. The programmes focus on wealth creation, improved welfare, and increased productivity. Such programmes include those undertaken by National Directorate of Employment (NDE), which was established by National Directorate of Employment Act of 1981.

The NDE's main objective is the designing and implementation of programmes to combat mass unemployment.

Other programmes are those initiated by various centres like women development centres, women's education units from the Ministry of Education at Federal, States, and Local Government levels, and the defunct Better Life for Rural Women Programmes. At the Local Government level, different kinds of vocational skills acquisition programmes are organised for women. However, types may vary from one Local Government Area to another.

In spite of these initiatives, the condition of most women in Nigeria still remains the same (Babalola, 2014). Unfortunately, most of these programmes do not address the needs of the women for empowerment. Thus, many women continue to wallow in ignorance and remain within the culture of silence favoured by society (Aderinto & Akande, 2003; Ojobo, 2016). The author is concerned that programmes and activities designed by governmental and multi-national agencies fail to impact women's lives positively because the processes leading up to executing those programmes are not participatory.

The argument of this paper asserts that there is the need for women in Nigeria to be empowered and liberated. The promotion of women's empowerment as a development goal is based on a dual argument: that social justice is an important aspect of human welfare and is intrinsically worth pursuing; and that women's empowerment is a means to other ends. The author, therefore, attempted to answer the following questions.

- What is the availability of women empowerment programmes in Ife Central and Ede South local government areas?
- Are women involved in the planning and implementation of the available empowerment programmes?
- What problems militate against women empowerment in the areas covered by the study?

Relevant Literature

Although 'empowerment' is a term that has been embraced by a diverse range of institutions and people, few of them share common definitions of the term. While it is seen by some as the expansion in people's ability to make strategic life choices in a context where this ability was previously denied them; others see it as a multi-dimensional process of civil, political, social, economic, and cultural participation and rights (Kabeer, 2001; Malhotra, Schuler, & Boender, 2002; Moghadam & Senftova, 2005).

Again, while some authors described empowerment as the process of increasing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes; some see it as the process by which leadership transfers authority and responsibility to the lowest field level in order for people to make implementation and application decisions (Krishna, 2003; Brant, 1996). Narayan (2002) defined empowerment as the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives. Also, Page and Czuba (1999) defined empowerment as a multi-dimensional social process that helps people gain control over their own lives, a process that fosters power in people for use in their own lives, their communities, and in their society, by acting on issues they define as important. Empowerment programmes should be appropriate and relevant to women's needs. This is why women should be involved in the development of these programmes from the beginning. If women are to gain power, they must participate in the definition of their problems, the identification of potential solutions, the implementation of these solutions, and evaluation of the project(s) undertaken.

Participation has been employed as a tool to enhance women's ability to vocalise their needs and determine their own course of development (Aksornkool, 2005). Fink (1992) and Stromquist (1997) as cited in Aksornkool (2005) observed that "most literacy programmes are gender-blind" (p. 12). This is a reference to the problem of non-recognition of women's needs and interests in programmes that aim to empower women.

Therefore, for empowerment programmes to have relevance, and thus benefit the women for whom they are

intended, they must be woven into the practical, everyday environment in which these women live. Referencing the need to make literacy for empowerment meaningful, Stromquist (1995) as cited in Aksornkool (2005), believes that achieving empowerment is dependent upon developing "a model of learning close to the women's everyday experience that builds upon the intellectual, emotional, and cultural resources the participants bring to their social space" (p. 10).

Methods of Data Collection

This was a descriptive research that employed a qualitative strategy. The study focused on two local government areas, Ife Central and Ede South Local Government Areas. Eighteen female beneficiaries of adult education programmes provided by Ife Central and Ede South Local Government Areas in Osun State were involved in the study. Although ten female beneficiaries of adult education programmes were selected from each local government through convenience sampling, two of the women were not available for in-depth interviews. Also, although three local government officials were purposively selected in each local government area, one of them was not available for interview. Among the five officials interviewed was a male Executive Secretary who was in charge of Ife Central local government area and a female Executive Secretary who was in charge at the Ede South local government area.

The instrument for the study, a structured interview guide, asked female beneficiaries how they got information about adult education programmes they were attending, and the point at which they started interacting with local government officials. In addition, they were asked to talk about the specific ways in which they had participated in the planning and implementation of the programmes; that is, apart from being learners in the programmes. The major issues that were raised during the interviews with local government officials included the following:

1. The number of women empowerment programmes available in the local governments
2. The actual contents of the programmes
3. The number of women who had benefitted from the programmes
4. The point at which women were invited to take part in those programmes

Data from the interviews were analysed using content analysis.

The Respondents

Only four respondents were within ages 15-21, ten were within ages 26-45, six were within ages 46-55 years, while only three were 56 years and above. Participants' educational attainments varied: six had no formal education, nine possessed the Senior Secondary School Certificate, while the rest ended formal schooling after they had completed primary schooling and the junior school certificate examinations. All five local government officials had schooling up to university level. The eight beneficiaries interviewed in Ede South Local Government were Muslims while the ten beneficiaries interviewed from Ife Central were Christians. Thirteen of the beneficiaries were married, two were single, and three were divorced. The major occupations of respondents were farming and trading. They also engaged in income generating activities such as tailoring and marketing medications. All participants except three women had a means of livelihood.

Analysis and Discussion

Women Empowerment Programmes Available in the Two Local Government Areas

There were vocational skills acquisition programmes such as soap making, powder making, body-cream making, catering, tie and dye, hair-cream making, insecticide, stove-wick making, mop-wick making, beads making, etc.

The programmes were offered from 10 to 15 days. While all the beneficiaries from Ede South Local Government were given N-10,000 (ten thousand naira) and their certificates immediately after the programme, the participants in Ife Central Local Government got neither money nor certificates. They were promised money and certificates which they were still expecting six months after the training programme.

When the beneficiaries of skills acquisition programmes were asked whether they had indeed acquired new skills, they all answered in the affirmative and expressed joy in their newly acquired skills. When they were asked if they had experienced financial improvement, only six out of the 18 beneficiaries from Ife and Ede had been able to make money from the skills acquired. The respondents from Ife Central local government complained bitterly about lack of access to acquire grants and absence of the certificates they had been promised. They maintained that the two issues had inhibited their capacity to use their newly acquired skills. Some said when they tried to use the newly acquired skills, existing associations stopped them because they could not show any evidence of participation in the empowerment programmes.

In Ife, local government officials listed skills acquisition and workshops, advancing loans and grants, the use of iru (Locust Bean) and how to plant Iru seed, and the widows' programme of 2012 as some of the women empowerment programmes they had provided. Other programmes listed were skills acquisition programmes such as soap making, cream making, beads making, mop-wick making, stove-wick making, and decoration. They were programmes that the participants in the study had mentioned. Officials, in interviews (2016), also mentioned widows' programme which involved giving money, grinding machines, and deep freezers to widows free of charge. Most of the programmes were said to have started since the local government area came into existence and had taken several shapes over the years. The local government officials pointed out that the skills acquisition programmes were for illiterates and had been taking place annually, while workshops were usually organised for the educated.

The real clientele of the skills acquisition programmes were, in reality, different from those the local government officials had in mind. This is because most of the women who had participated in the skills acquisition programmes had some level of formal schooling.

Women Involvement: Planning and Implementation of Skills Acquisition Programmes

The participants in the programme were asked if they were involved in the needs assessment for the programmes; all the beneficiaries in Ede South and Ife Central said they were not involved. They did not know why they had been asked to report to the local government office. When they arrived at the office, they were told about the skills acquisition programmes. They were then asked to choose from the available skills training programmes.

Officials interviewed (2016) in Ife said that the council did rural appraisals at times, by going to people and asking about their needs. The appraisal incorporated gender equality. Through the rural appraisal, the needs of the community members were gathered and prioritised. However, in Ede local government area, when officials were asked if they carried out needs assessment before the commencement of training programmes, the officials submitted that the UNICEF assisted programmes had a plan of action. The needs assessment for such programmes was usually done through the state and through the L.G.A official who would visit communities and ask for their needs. Thereafter, plans would be put in place for the implementation of the programmes, and those selected would participate in the programmes.

When women were asked who nominated them for the programmes, six women from Ede South were nominated by their Community Development Association (CDA) leader while two were nominated by the CDA leader in Ife Central Local Government. Four of the beneficiaries from Ife Central were nominated by the ward leader and two by their political representatives at ward level.

In Nigeria there are 3 levels of government, the Federal, States and Local Government Areas (LGA). The LGAs,

in Nigeria which is the third level of government is closer to the people and is within the people. The 1999 constitution of Nigeria recognises the existence of 774 Local Government Areas (LGAs). Each local government area is administered by a Local Government Council consisting of a chairman who is the Chief Executive of the LGA, and other elected members who are referred to as Councilors. Each of the LGAs is further sub-divided into wards with a minimum of ten and a maximum of fifteen (FRN, 1999). The other four women were nominated by persons such as the Personal Assistant to the Chairman, a mother that works in the local government area, a brother, and someone from the local government office. This conflicted with the process of selection the local government officials insisted they followed.

When the LGA officials were asked how women were selected for skills acquisition programmes, they indicated that women were selected through community development associations (C.D.A) and the women development units (W.D.U). The Community development Council (C.D.C) is the umbrella body at the Local Government level. When there is a programme, the council sends a letter to the leaders of C.D.C. and W.D.U. because their leaders know who to send. When a soft loan is available to be given to individuals through the C.D.A and the W.D.U, the leaders know who would pay back a loan and who would not; so they assist in recommending those qualified to receive the loans, and sometimes assist in getting beneficiaries to refund soft loans.

Problems Militating against the Empowerment of Women in the Study

In the preceding sections, women in Ife Central Local Government pointed out that they could not use the skills acquired because their certificates were not handed over to them. They were not given take-off grants, which are the monies promised to assist them put the skill acquired to an immediate use. However, despite the fact that all the beneficiaries in Ede South were given the take-off grants and certificates after training, some still complained that they could not make money from the skills acquired due largely to their poor financial position. Other reasons given included high cost of materials, lack of market for their products because they live in the rural areas, and non-availability of materials in their village.

They also complained that the grant they were given was too small and not enough to buy materials, especially those that learnt soap making. In an oral interview (2016) with one of the officials of local governments, the position of the women was corroborated. The official stated that only N500, 000 was allocated to his office, and it was nowhere close to the needs of the poor women. He even said local government officials have had to put their feet down many times so that the process would not be hijacked by politicians who may want to dispense the funds as favours to their members only.

In an oral interview (2016) with another official of the local government, the problem of culture that encourages people to spend money recklessly was mentioned. He believed some participants were too materialistic and would not cut their coats according to their cloth. Such people wanted to do the same as persons around them were doing, and this affected and prevented them from doing well economically.

In Ede Local Government Area, although the officials also mentioned many of the problems already highlighted by the local government officials in Ile-Ife, their women's empowerment programmes faced very remote problems that were common to their environment. The officials further stated that most of the participants in their programmes were farmers and were involved in oil palm production. Whenever oil palm was in season, the women would abandon the skills acquisition programmes and the skills acquired in such programmes and go to the farms. Likewise, during the market days, the women would go to the markets.

The Administration of Adult Education Programmes

When asked if there was a department of adult education and whether there was any programme that catered for women empowerment, one of the officials in Ife Central local government in an oral interview (2016) stated that

there was no department of adult education in the local government. The Department of Non-formal Education, under which they managed Adult Education, Nomadic Education, and Early Childhood Education, was available. The adult education unit no longer existed, but the local government was trying to resuscitate it and new centres were being planned for Oja Tuntun Area and Sabo within the Hausa community in Ile-Ife.

Yet another official from the same local government mentioned in an oral interview (2016) that they did not have a department of adult education in the local government secretariat. However, the Department of Social Development took care of the women development unit. Under the women development unit, skills acquisition programmes, the programmes for the aged, and empowerment programmes for the women were organised. Thus, within the same local government, the officials were not quite sure which department or unit had responsibility for women's empowerment programmes.

Conclusions and Recommendations

Based on the analyses of the empowerment programmes, the following conclusions were reached:

I) Ede South and Ife Central Local Governments had organised and were still organising women empowerment programmes. Most of the women interviewed appeared to be happy with the skills they had acquired.

2) Women were not involved in the planning of these programmes which were initiated and implemented based on needs assessment procedures that were not systematically undertaken. Officials usually appeared to be focusing more on ascribed needs, than felt needs. The problem of female farmers abandoning skills acquisition programmes for oil palm production in Ede local government is a symptom of the problems that haunt adult education provisions when officials focus on ascribed rather than felt needs.

3) Beneficiaries who were making use of skills they had acquired could not access the needed materials, because they were not available in their locality. They were expensive, where available.

4) Also, the process of selecting participants for the programmes did not follow the processes, most of the time, laid down by the local authorities.

5) There was some confusion in one local government about the department that was in charge of women empowerment programmes.

Recommendations illuminating from the study are as follows:

1. Women do not need to be objects of development programmes.They need to gain control of the development process; therefore, local governments should involve women and their representatives in the assessment of their felt needs.
2. The local governments need to be re-organised to have a department of adult and non-formal education. That department will then have a women's education unit, and the mandate of the unit will be the initiation and management of women's education programmes.
3. The women's development unit, which is under the umbrella of the social development department of local governments, can attend to other women's empowerment issues, working of course in conjunction with other departments in the local government.
4. Women should be given much needed support when they have participated in specific skills acquisition programmes. The support requires access to credit, the physical space in which to operate, and education that helps them develop good business management skills.

References

Aderinto J. A., & J. O. Akande (2003). Gender inequality and its effects on women participation in community development projects in Nigeria. *Tanzania Journal of Population Studies and Development*, 10, 109-115.

Aksornkool, N. (2005). *Literacy and Rural Women*. Paris: UNESCO.

Babalola, A. C. (2014). *Effect of Literacy Education and Social Capital on Rural Women's Involvement in Community Development in Southwestern Nigeria.* (Doctoral Thesis). University of Obafemi Awolowo University, Ile-Ife, Nigeria.

Brant, G. D. (1996). *Empowerment in NRCS:What Works! Social Sciences Institute* Technical Report Release 3.1 https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045594.pdf

Ekong, E. E. (2010). *Rural Sociology*. Uyo: Dove Educational Publishers.

Featherstone, L. (2013). Girls and women are vital to progress in Nigeria. *Department for International Development*. Retrieved from https://www.gov.uk/government/news/girls-and-women-are-vital-to-progress-in-nigeria

Federal Republic of Nigeria (1999). *Constitution of the Federal Republic of Nigeria*. Abuja: Government Printer.

Government Officials, Nigeria (2016). Interviews by A.C. Babalola. Obafemi Awolowo University, Nigeria.

Kabeer, N. (2001). Reflections on the measurement of women's empowerment. In H. Hinzen *Discussing women .c empowerment: Theory and practice* (p.4). Stockholm, Sweden: Sida.

Krishna, A. (2003). '*Social Capital, Community Driven Development, and Empowerment: A short note on concepts and operations',* WB, Washington, DC: World Bank working paper 33077, WB: Washington, D.C.

Malhotra, A. S., R. Schuler, & C. Boender (2002). *Measuring women empowerment as a variable in international development.* Background Paper for the World Bank Workshop on Poverty and Gender: 'New Perspectives' Washington, D. C.: The World Bank.

Moghadam, V.M., & L. Senftova (2005). Measuring women's empowerment: participation and rights in civil, political, social, economic, and cultural domains. *International Social Science Journal*, 57, 389-412.

Narayan, D. (2002). *Empowerment and Poverty Reduction: A Sourcebook* Washington, D.C., World Bank.

Ojobo J. A. (2016). Education: A catalyst for Women Empowerment in Nigeria. Retrieved from http://www. library.unesco-iicba.org/English/GirlsEducation/All Articles/General/Education A Catalyst for Women Empowerment in Nigeria.

Opeke, R., & A. Okwilagwe (2000). Nigerian rural women as targets of development efforts: the issue of relevant information. *International Journal of Continuing and Non-formal Education*, 1, 80-89.

Page, N., & C. E. Czuba (1999). Empowerment: What Is It? *Journal of Extension*, *37*, 5.

About the Authors

ADEJOKE CLARA BABALOLA, PhD, is a lecturer in the Department of Adult Education and Lifelong earning at Obafemi Awolowo University, Ile-Ife Osun State, Nigeria. Her research area covers adult learning, community development, sociology of adult education, especially as it relates to women's issues and rights.

PHYLLIS CURTIS-TWEED, PhD, graduated from Emory University and then pursued postdoctoral training in psychology in the clinical research training programme in social psychiatry at Harvard. She was a psychology instructor at Harvard Medical School, the Harvard Graduate School of Education, Harvard-affiliated hospitals, and Simons College. She is an executive board member and treasurer of the Association for Moral Education. She has published and presented at conferences on psychology and education. Dr Curtis-Tweed has served as a faculty member and executive administrator at Medgar Evers College of the City University of New York and at Oakland Community Colleges in Michigan. Dr Curtis-Tweed returned to Bermuda as the seventh principal of the Berkeley Institute. In August 2017, she joined the staff at Bermuda College as Vice President of Academic and Student Affairs.

MEREDITH EBBIN is founder and editor of bermudabiographies.com, a website containing biographies of peo-ple who have made a contribution to Bermuda. She is a former registered nurse who subsequently became a jour-nalist. She worked for all three main newspapers: *The Royal Gazette*, the *Mid-Ocean News*, and the *Bermuda Sun*, but spent most of her career at *the Bermuda Sun.* She was managing editor of *The Bermudian* magazine for four years and was editor of *Bermuda 1609-2009—400 Years 400 Portraits*, which was produced by Bermuda's 2009 Committee in celebration of the island's 400th anniversary. She was also the first executive officer of the Media Council of Bermuda. She retired from journalism in 2008, but continues to work as a freelance writer and researcher.

WOLDE SELASSIE, B.A., B.ED, is a Standards and Enforcement Officer with the Department of Workforce De-velopment, Bermuda. He has degrees in Philosophy and Political Science from the University of Alabama, Teaching Technical Subjects from Queen's University, and an Associate of Applied Technology degree from J.F. Drake Tech-nical College. Mr. Selassie was a senior school classroom teacher for over eighteen years. He has also worked as a Safety Officer on a real estate development in the Turks and Caicos Islands, served as a Grant Writer and Fund-Rais-ing Officer for the United Way of North Alabama, and has volunteered as a community Technical Teacher in Arusha, Tanzania.

RADELL TANKARD, PhD, is employed by the Department of Education and currently serves as the Acting Assis-tant Director for senior schools in the Bermuda Public School System. He currently assists with the implementation of the City & Guilds curriculum at the middle and senior school levels. Dr. Tankard also assumes responsibility for the development and administering of end of year senior school examinations in several disciplines. Additional responsibilities include overseeing the Career Pathways Programme, and he collaborates with faculty at Bermuda College to monitor students in the dual enrollment programme.

RAYMOND DAVIS, aka **KHALID ABDUL WASI**, is a 1968 graduate of the Bermuda Technical Institute and its continuing education programme for carpentry and joinery until 1970 when he completed his City and Guilds Building certification. He was self-employed by the age of 21. Wasi built numerous homes and prominent build-ings in Bermuda whilst employing more than 50 tradesmen. By 1992 he had the largest black-owned construction company in Bermuda. Wasi has been successful with his entrepreneurial pursuits.

LYNETTE WOODS, PhD**,** retired assistant to the president of Bermuda College for special projects. She was one of the driving forces behind the establishment of a journal at Bermuda College. Dr. Woods is currently a member of Bermuda College's publication committee and co-editor of the journal's editorial board. She is also a certified trainer in appreciative inquiry, a skill she has used to assist in developing strategic plans for two colleges.

Contributor Guidelines

Contributions are welcome from all areas of scholarship relevant to student success. Manuscripts are expected to be original works able to withstand intensive peer review. Topics may address any area of educational scholarship, including humanities, science, social sciences, fine arts, politics, curriculum, assessment, pedagogy as well as institutional policy, historical perspectives, and professional themes. While the journal serves primarily Bermudian interests, any manuscript submitted for publication should be of international interest and have scholarly significance for research, policy and practice.

Authors, rather than the editors or Bermuda College, bear responsibility for accuracy and for the opinions expressed in articles published in *Voices in Education.*

The guidelines below will assist contributors as they write their articles for this journal. Guidelines and timelines must be observed.

- **Format of manuscripts.** Use APA Style (6th ed.). Font Size 12, Times New Roman. Articles should be double-spaced and no longer than 3,500 words. Longer articles will not be accepted. **There should be no footnotes.** Submissions **must only** be sent via email as a **Word** document attachment to bcjournal@college.bm. Submissions **must** be received on the due date at midnight Atlantic Standard Time. Late submissions will not be accepted.
- **Parts of manuscript.** All submissions must have a title page, an abstract and complete, and accu-rate references based on APA guidelines.
- **Abstract and key words.** The abstract should not exceed 200 words. It should be followed by a list of key words.
- **Manuscript content.** Articles are accepted for publication on the understanding that the editors and editorial board reserve the right to edit for clarity and style. Articles that are reviewed and edited may be sent back to the author for revision.
- Where applicable, articles must contain relevant empirical data. Authors are responsible for the accuracy of references and citations. Articles without references will be rejected. Manuscripts will not be returned.
- **Illustrations and tables.** All illustrations and tables must have a corresponding reference in the text.
- **Citations.** Online sources should be accompanied by the most recent access date.
- **Manuscript ethics.** Do not submit articles that are under consideration for publication in anoth-er periodical, have been published in another periodical, or have been presented at a conference. Articles become the property of *Voices in Education*.