

Academic Failure & The Skills Gap

by Ralph J Massey

This is the Print Version of the Video that can be viewed by “left-clicking” the following:

<http://www.vimeo.com/6629026> .

Introduction

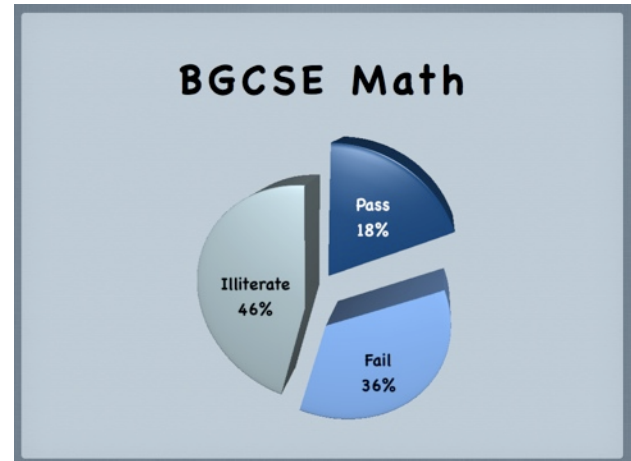
I am Ralph Massey, an economist, a retired banker and a long-time resident of the Bahamas. I want to talk to you about “The Learning Crisis in the Bahamas”.

Employers have lived with this crisis for years. The tourism industry began a Coalition for Education Reform in 2004 to address this problem; and the business community is presently pursuing that initiative.

Everyone is made aware annually of the learning problem with the annual announcement of the BGCSE results, the Bahamas General Certificate of Secondary Education exams for public and private school leavers.¹

Since this testing system was started in 1993 the results have always been summarized with a single grade, a D+, D or D-. Everyone agrees that such a grade was and is unsatisfactory; but the annual releases never went into any detail. There was simply “generalized public hand-wringing” over the results and the results not being as good as they should be.

In fact, this single grade covered up really embarrassing test results such as this!



A BGCSE grade in math. This grade was never mentioned in the annual BGCSE reports.

And...the BGCSE reports have never discussed the long-term impact of such academic failure. They never discussed the impact on the supply of basic skills as seen in Bahamian labour. That is not until December of 2008.

The change came with the release of a new loan agreement between the Bahamas and the European Union (EU).

The Skills Gap

The EU and the Bahamian Government renewed the EU development funding plan and made two points related to the Learning Crisis:²

1. The plan observed that in the past “High levels of Bahamian unemployment continued to exist despite high levels of Foreign Direct Investment and economic growth. There was a need for skilled labour but that need was not filled only by Bahamian labour.”

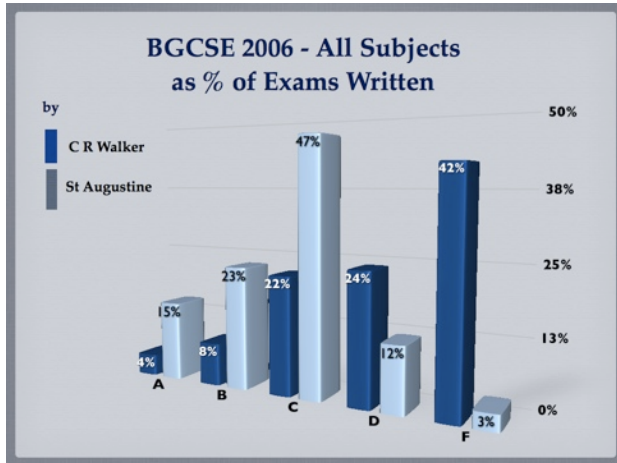
¹ BGCSE, The Bahamas General Certificate of Secondary Education 2006, Government of the Bahamas Department of Education.

² Bahamas/ European Union Strategy Paper - 2008-2013, page 16, http://ec.europa.eu/development/icenter/repository/scanned_bs_csp10_en.pdf

- There was a Bahamian “Skills Gap”; and the nation ended up using “**Imported Labour**” to meet a shortage of qualified Bahamians at all skill levels.

The uncomfortable truth is that the country’s academic failure prevented it from achieving fully its welfare objectives for its own citizens.

The severe academic failure appears in the Public Schools test results...and can be shown in two graphs.



Two Top Schools

The first graph is a vertical bar chart that shows the 2006 BGCSE test results for the top scoring public and private high schools on New Providence, C R Walker and St. Augustine.

The test results are shown on the vertical axis as a percent of exams written by each school for each grade shown on the horizontal scale. That is zero to 50% on the right-hand side and A thru F on the bottom scale.

In the 2006 exam 4% of the C R Walker students earned an “A”

and...15% of the St. Augustine students got an “A”.

The same pattern is repeated for grade “B”.

And for grade “C”.

BUT...the pattern reverses with grade “D”. 24% of the C R Walker students got a “D” whereas 12% of the St. Augustine students got a “D”

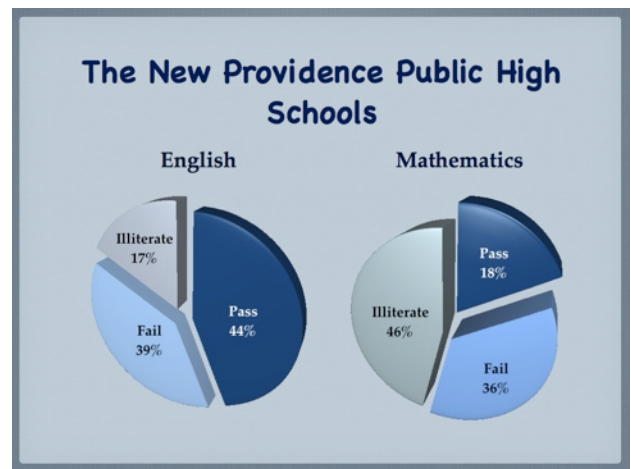
AND...42% of the C R Walker students got an “F” versus 3% for St. Augustine.

In reality the Bahamas has had a Public School learning problem for several decades and, by talking about the average score for all schools and all subjects, the severity of the problem was not visible to parents and voters. Thus a public embarrassment was avoided.

And...this is not the whole story.

Language and Mathematics are the two great inventions of humans, they facilitate the acquisition, communication and organization of knowledge.

Furthermore, they are the cornerstones for all learning...**a learning that begins at birth.**



English & Math

Let us look at the 2006 BGCSE scores in English and Math for the public High schools on New Providence. **Look At Them Carefully!!** These two pie charts **are stunning in what they show.**

Illiteracy in English means that the student cannot read or hear and then communicate in a coherent manner.

Illiteracy in Math means that the student does not know the difference between addition and multiplication. PAUSE. Let’s look at that crisis in words.

- In English...44% Passed and 56% Failed; 17% both Failed and were Functionally Illiterate.

- In Math...18% Passed and 82% Failed; 46%, almost one-half, both Failed and were Functionally Illiterate.

PM's Words

This results were correctly described by Prime Minister at the close of the July 2009 Education Summit.

- "Our success in getting every child into a classroom has not translated into every child having achieved his full potential" ..and...
- "Too many students leave our secondary schools only semi-literate and semi-numerate."

Economic Consequences

The problem with academic failure is that it adversely affects economic growth by limiting the growth in the nation's supply of Human Capital...its human skills.

Gary Becker, the University of Chicago economist, got his Nobel Laureate in 1992 for his work on Human Capital. He states that significant economic growth is invariably accompanied by "large increases in education and training."³

But...the problem is exacerbated by the fact that human knowledge and technology progresses at an accelerated rate. To the casual observer of computer technology over the past 25-years this is obvious. Ray Kurzweil, the inventor and futurist, went one step further by tracing major technological innovations since the beginning of time.⁴ His work supports that conclusion.

³ Gary S Becker, "Human Capital", *The Concise Encyclopedia of Economics*, <http://www.econlib.org/library/Enc/HumanCapital.html>

⁴ Ray Kurzweil, *The Singularity is Near: When Humans Transcend Biology*, Viking, 2005.

⁵ TIMSS 2007 Assessment, "Average Achievement in the Mathematic Content and Cognitive Domains", Chapter 3, TIMSS & PIRLS International Study Center, Boston College.

Globalization

These realities...global competition and changing technology...are particularly daunting in the case of the Bahamas because it is a small country with a limited array of physical resources.

There is no need to elaborate on globalization of the world's markets for both goods and services other than to

- Indicate that countries now realize the importance of human skills and capabilities, and to
- The advanced and the emerging countries have developed two testing systems that measure the relative performance of national educational systems.

Global Academic Testing

The first is the TIMSS (Trends in Mathematics and Science Study) system that was pioneered by the U.S. and the Pacific Rim countries.⁵ The second is the PISA system developed by Europe and the OECD countries (the Organization for Economic Cooperation & Development).

In the TIMSS 2007 8th Grade Math exam, the top five countries were Singapore, South Korea, Hong Kong, Taiwan and Japan.

And the bottom five were the Philippines, Botswana, Saudi Arabia, Ghana and South Africa.

Among the 55 countries tested, there were four distinct groups.

The Bahamas does not participate in either system; and if it did, it would probably fall in the bottom quartile.

The United States & TIMSS

It is helpful to note that **learning** is not solely a Bahamian problem. The United States falls into the second group; and, according to The National Academy of Education, it is “facing a growing literacy crisis.”⁶ In summary -

- Poor and minority children remain far behind their more advantaged counterparts despite recent progress.
- All children must go beyond reading words and be able to “analyze, interpret and critique the written word” and acquire stronger oral language skills.
- Greater numbers of highly skilled scientists, mathematicians, engineers and innovative thinkers are needed...that is what the U. S. needs if it to remain competitive.

Conclusions

In a highly competitive world and with rapidly changing technology -

- “The High Failure and Illiteracy rates in the Bahamian public education are a severe national handicap and an embarrassment.”
- Its severity demands an adequate national response!⁷

Thursday, September 24, 2009

⁶ http://www.naeducation.org/White_Papers_Project_Reading_and_Literacy_Briefing_Sheet.pdf

⁷ The Marshmallow Test showed the important interaction of Cognitive Skills and impulses and feelings. The Self-Discipline and Delayed Gratification created are so important for sound judgement and constructive living.