

The Quality of the Workforce: Productivity Piece

Productivity refers to the efficiency at which inputs can be transformed into outputs. The more productive a society or entity the better it can transform a given set of inputs into outputs. Within any society or entity many different factors can influence that efficiency. These factors range from work arrangements and systems to the level of technological adaptation and capital infrastructure used. In this piece however, we focus on the quality of the workforce which is a key input and factor of production. The quality of the workforce is important and speaks to the intrinsic and intangible aspect of workers including their drive, analytical skills, ingenuity and ability to innovate. These traits, particularly the ability to innovate and be driven, often results in the worker in conjunction with the management team identifying new approaches to doing business which often redounds to the benefit of both the worker and work environment.

Despite the importance of these intangible traits, it is often difficult to speak about them in an objective and measured way given that there is little empirical ways to capture and measure them. Consequently, other variables are often used to serve as a proxy for workforce quality. The most used of those are the performance at various educational stages of the worker. The thinking behind this is that success in those exams can be a rough proxy for drive and analytical skills. The better an individual performs the more drive and skills he/she is assumed to have. While this assessment is not without its flaws, reasonable levels of data for Saint Lucia exist on the education system and provides for an interesting case study. How well are our students (and therefore soon to be workers) performing at various exams and does this say anything about the quality of persons entering the work force? Information on the average percentage pass rates for the CXC examinations and for the A' Level Cambridge and CAPE exams will be our two reference points in this piece.

Over the last 10 years the average number of CXC subject entries, which is a function of the number who sat the exam multiplied by the number of subjects written, was 15,166 annually with an average pass rate of 68.7 per cent. While there has been some volatility in both the subject entries and pass rate, in the main, both have been on an upward trend. The number of subject entries rose to 15,096 in 2014 from 12,817 in 2005 while the pass rate rose to 71.4 per cent in 2014 from 70.6 per cent in 2005. An interesting dynamic of this performance can be found by assessing the distribution of these passes between the grades i.e. passes at grades 1 through to 6 with a grade one being the highest and a 6 the lowest. Over the full period studied (10 years) the percentage of subject entries which were grades of one or two averaged 13.1 and 25.2 per cent respectively while the majority of entries (30.3 per cent) were grades three. The distribution of exam performance across the remaining three classifications in sequential order were 18.3, 11.8 and 1.0 per cent respectively. Taking a more recent view however there have been some positive developments with increased percentages of passes at both the grades one and two levels and reductions at the grade three and four. The percentage of students who received grade ones inched up to 14.8 per cent from 13.1 per cent while the increase was more nuanced on the grade two with an increase to 25.8 from 25.2 per cent. Tempering this positive news concerning pass rates is the fact that the dropout rate at the secondary school level for males has averaged 1.9 per cent between 2004 to 2013 with a high of 2.4 per cent in 2011, seemingly on an upward trend and for females 1.0 per cent.

Although there are many levels of tertiary education which we can assess to gauge worker quality the most readily available series of data is the percentage pass rate at the Division of Arts Science and General Studies (DASGS). As such we will briefly assess those results. At the DASGS percentage pass rates rose to an average of 75.6 in 2014 from 73.8 per cent in 2007 and the percentage of passes between grades A to C rose to 41.5 per cent from 23.1 per cent in 2007. Complementing these statistics is the fact that enrollment at the main divisions of the Sir Arthur Lewis Community College 2346 in 2013/14 from 1689 in 2006/07 and a fall in the dropout rate from a high of 5.9 per cent in 2008/09 to 3.4 per cent 2012/13.

In the previous paragraphs we have sought to assess the percentage pass rates and distribution of grades receive at two education levels secondary and tertiary to provide a rough approximation of the quality of the workforce. In both instances evidence suggest that our students are performing better but there are many caveats which need to be mentioned. The first is that there appears to be an imbalance balance between the number of students doing science technology engineering and

mathematics (STEM) subjects relative to humanities. Estimates for the year 2014 put this at 39.0 per cent which is low given that Sir Arthur Lewis in his writing on economic development urged developing countries to increase this number as a prerequisite for a truly innovative workforce. The second is the number of drop outs are high with more than one hundred dropping out annually. The third is that only a few students pursue education post-secondary school leading to a worker force without higher order skills sets. Soft skills which include communication skills and emotional intelligence are traits which even the most successful in the academic arena may lack and we need to build systems which engender these into our citizenry. The morale of the piece is that a lot needs to be done to build a productive workforce but we do have a foundation with which we can build on.

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