A REFLECTIVE ANALYSIS OF EDUCATIONAL REFORMS IN MAURITIUS

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Abstract – Mauritius, a developing island, launched the Digital Mauritius 2030 strategy, aiming to provide access to high-speed internet across the country to promote technology in education that plays a crucial role in addressing limited access to educational facilities in remote regions. With the advance of technology, magnetic and digital tools, and virtual platforms, learners can access high-resolution educational resources regardless of their gender, background, and location. On the side, reforms in different sectors have proven to promote an inclusive society, helping individuals to adapt more easily to their aptitudes and living standards. One such reform is Educational reform which refers to bringing a change in the educational curriculum by implementing key ideas, projects, and programmes for the advancement and progress of the population. This study analyses the realization and vital elements of different educational reforms in Mauritius, particularly emphasizing the Nine Years Schooling and the implementation of the Nine Years Continuous Basic Education (NYCBE). The paper comes with a strategic plan on how the NYCBE can be reinforced to promote a quality of education for a lifelong learning of learners in Mauritius.
Keywords: Educational Reforms, NYCBE, the Mauritian Society, curriculum, digital.

INTRODUCTION

In Mauritius, the government is bound to the Constitution and laws. The 1968 Constitution of Mauritius and the 1957 Education Act of Mauritius in themselves do not mention education technology but the amended 2001 Information and Communication Technologies Act delivers the legal framework for regulating and promoting the use of ICT in Mauritius, which includes the establishment of the Universal Service Fund. However, the 2008-2020 Education and Human Resources Strategy Plan elaborates ICT in the context of enlightening the teaching, learning and management of education in Mauritius. In addition, the 2020 Covid-19 (Miscellaneous Provisions) Bill (No. I of 2020) which was voted for introducing amendments to existing laws and policies during the pandemic describes distance education as *"the delivery of educational programmes slightly to learners through the use of a variety of technological tools and platforms as a means of complement or an alternative to face-to-face learning"*.

It is to be noted that the integration of technology in the education sector is a cross-cutting strategy of the 2008-2020 Education and Human Resources Strategy Plan, including all grades in the Mauritian educational curriculum. For secondary education, the use of ICT for teaching and learning is increasing. The plan promotes objectives such as the training of educators in using technology in classrooms, the allocation of resources to equip all schools with required ICT facilitates and the development of relevant ICT plans. The plan also identifies the importance of science, technology, and innovation at all levels of education. The requirement of promoting digital skills, use of e-learning modalities in schools and improving Science, Technology, Engineer and Mathematics (STEM) education in the country have been emphasized in many policy documents such as the 2018 Digital Mauritius 2030 Strategic Plan, 2021 Institute of Technical Education And Technology Act and the 2020 Covid-19 (Miscellaneous Provisions) Bill (No. I of 2020) amended Section 36 of the Education Act by tallying a isolated clause for distance education during temporary school closures.

The 2020 Covid-19 (Miscellaneous Provisions) Bill (No. I of 2020) orders the government to command any educational institution to run distance education and online learning programmes, including broadcasting lessons during Covid-19-related school closures. Moreover, it entails the teaching staff

and other personnel of the educational institutions as well as the employees of the Ministry or other statutory bodies to monitor and supervise the conduct" of distance learning. It also focuses on that any failure to facilitate distance education by the Minister or a member of an educational institution will be considered a breach of their employment contract and would be liable to disciplinary reports.

One fundamental computer for e-learning is the infrastructure and devices related to technology. First and foremost, devices are core elements to digital learning: One of the strategic goals of the 2008-2020 Education and Human Resources Strategy Plan was to ensure that all pre-primary and primary and secondary schools are equipped with information technology facilities by 2015. The government of Mauritius launched the Early Digital Learning Programme in 2018 involved the provision of digital learning devices in the form of tablets to educators and learners of grades 1 to 3 and each secondary institution should be equipped with fin-tech applications; an electronic board to facilitate learners to use digital platforms. Another vital element of digital learning is Internet connectivity. One of the six projects registered in the 2012-2020 National Broadband Policy of Mauritius is to provide every public institution such as schools with affordable access to at least 100 Mbps broadband service by 2020. Generally, Mauritius is aiming to improve broadband connectivity and speed to all schools and libraries with wireless connectivity for at-home learning devices.

Using technology and the internet involves pop-ups and hackers and it is a harm to learners' privacy. However, the 2007-2011 National ICT Strategic Policy and the 2011-2014 National ICT Strategic Plan developed the 2014-2019 National Cyber Security Strategy. The report provides guidelines, measures, and action plans that can be used to increase the country's resilience to cyber threats. One of the four goals of the strategy is to boost cybersecurity education at all levels from primary to tertiary education by including it in the curriculum and research activities. The 2017 Data Protection Act was passed in 2018 to reinforce "the control and personal autonomy of data users over their data" in Mauritius. The legislation aims to promote awareness of how personal information is used or can be used, including how data controllers, defined as "people or organisations holding information about individuals" must conform with the data protection preserving personal data. The legislation protects the privacy rights of individuals concerning various ways in which data of individuals can be recorded. The government of Mauritius also introduced the 2021 Cybersecurity and Cybercrime Act and the National Cybersecurity Committee to report online abuse and cyberbullying. It details cyberbullying as an offense. It is defined as "*any behaviour by means of information and communication technologies, which – (a) is repetitive, persistent and intentionally harmful; or (b) involves an imbalance of power between the perpetrator and the victim.*"

Mauritius has always been forward in reforming its developing sectors such as Health, Road Safety, and Education. The island built and had a strong relationship with the commonwealth, and it is a fact that since 2015, Mauritius devoted its strategies to making the island an educational hub. Since then, the government strongly committed to the United Nations' Sustainable Development Goals (SDGs) where much emphasis is put on its Vision 2030 places education as a foundational pillar for fostering a skilled and empowered nation to contribute to the nation's growth.

With the rapid pace of the evolution of Technology, e-education has the power to overturn the educational system and revolutionizing traditional teaching and learning to different digital models for teaching and learning. The support that technology brings to education is vast and many countries experience different modalities of teaching and learning through digitalization. Mauritius introduced several pilot projects to grace e-learning starting with interactive multimedia content and virtual reality programmes. Digital platforms help learners to learn in an innovative environment promoting debates, literacy, numeracy, creativity, critical thinking, and problem-solving skills. Mauritius launched the Digital Mauritius 2030 strategy, aiming to provide access to high-speed internet across the island to promote technology in education can play a crucial role in addressing limited access to

educational facilities in remote regions. With the advance of technology, magnetic and digital tools, and virtual platforms, learners can access a high-resolution educational resources regardless of their gender. background and location. Technology in education has proven to promote an inclusive society, helping for learners with disabilities to adapt more easily in their learning and reading.

A REVIEW OF THE EDUCATIONAL REFORMS IN MAURITIUS

Reform is an intricate theory. As a noun, the term is used to describe changes in policy, practice, or an organization. As a verb, "reform" refers to a proposed challenge to solve an identified problem. Educational reforms continue to haunt the small island's standard of living. Mauritius adopted a wide range of reforms in its educational sector, aiming to develop a model that can meet the target of the population.

1)   The Ward Educational Reform in 1941.

The very first educational reform introduced in Mauritius was the Ward Educational reform in 1941. The reform brought drastic changes in the level and modalities of how schools need to be operated on the island. Such changes are:

•   Introduction of oriental languages such as Hindi, Urdu, Tamil, and Telugu together with Agriculture and Crafts subjects in the secondary curriculum.
•   The reform brought English Scholarship Awards to promote the speaking, writing and learning of English language.
•   The construction of seven government secondary schools for girls who desire a professional career in the field of Medicine or Secretariat.
•   Ward focused that to promote a first-class secondary education, children allocated in primary schools should be graded according to their schools' infrastructure.

2)   Master Plan, August 1991 by the former Minister of Education, Arts and Culture, Armoogum Parsuraman. The Master Plan focused:

•   A major achievement of the system has been that it has provided the greater part of the manpower required for the first stage of the Mauritian Industrialisation (1991:29).
•   The education system will be called increasingly to provide managers, professionals, and technicians who will be replaced for the second phase of industrial development (1991:18).

The Master Plan 1991 constitutes 17 main projects in pre-primary, primary, and secondary education. Some of the key implementations in the secondary curriculum are:

•   Upgrading the quality of education together with the teaching skills of secondary school educators.
•   Extension and renovation of 21 state secondary schools.
•   Construction of five new State Secondary Schools for science and technical subjects.
•   An investment of Rs 80 million to promote Computer Education in colleges together with the development of Distance Education.
•   Promotion of Design and Communication Technology in secondary schools across the island.
•   Establishment of a National Inspectorate to promote economic and social development for an effective inspection.

3)   Action Planning, March 1998 by Kadress Pillay, Minister of Education and Scientific Research introduced a path of educational reform with some innovative ideas. Some of the innovations are:

- The introduction of the Nine Years Compulsory and Fundamental Education.
- Implementation of extracurricular activities such as subjects like Life Skills, Civic Education, Human Rights, and Culture and Art.
- The formation of ICT as a tool for teaching and the introduction of core subjects such as Accounts, Economics, Sociology, Food Studies, Art, and Design into three different departments; Management, Humanities and Science.
- Implementation of a National Curriculum Research and Management Board (NCRMB) to evaluate schemes for educators.

4)   "Ending the Rat Race in Primary Education and breaking the admission Bottleneck at Secondary Level, May 2011", by the Minister of Education, Steeven Obeegadoo. This reform has chronologically marked the history and maquette of the Mauritian educational curriculum. Some of the implementations are:

- Compulsory education till the age of 16.
The reform amended the Educational Act where education has been made compulsory till the age of 16. The criminal code has been amended simultaneously so that if someone is caught for child labour, there is a risk for imprisonment of five years with a fine exceeding Rs 100,000.00.
- Abolition of the Ranking System.
The CPE ranking system has been abolished and therefore widened the access to secondary education as within the existing ranking system, learners were admitted to colleges according to their ranks.
- Regionalisation
To promote Education For All, this reform introduced the regionalization concept to get admission to lower secondary schools. The notion of regionalization implies that after the result of CPE, learners would be admitted in a college to their respective region.

5)   Educational Reform in Action 2008-2014.
The Education and Human Resources Strategy Plan 2008-2020 is one of the key concepts of the reform with prime innovation in "Broadening of Access to Lower Six learners". The Novelty recognized since 2011 where the promotion towards lower six has altered to 3 credits and includes a pass in English language in SC instead of 5 credits. In addition, the "National Curriculum Framework (Secondary) 2009" where co and extra-curriculum subjects have been introduced in all State Schools. These subjects include Civil education, Road and Safety education, Entrepreneurship, Health and Wellness, Social Sciences, Marine Science, Inter alias, Travel and Tourism, and Sex education.

6)   The Nine-Years Schooling.
The Nine Years Schooling is a new pedagogical reform implemented by the Ministry of Education and Human Resources with a vision to promote holistic and life-long learning. The Nine Years Schooling focuses on both primary and secondary education up to 15 years of age limits. The reform has been realised with the United Nation Sustainable Development Goal 4 on Education ensuring an inclusive and equitable quality of education and promoting lifelong learning opportunities for all. According to Commonwealth (2017), the Nine Years Schooling is expected to allow learners to better develop and adapt their learning through research, reflection, and creativity and promote the learners from learning in a more vocational environment rather than a purely academic setting.

To path the Nine Years Schooling, the government launched the Nine Years of Continuous Basic Education (NYCBE) booklet, acts as a support to reform and implement the new reform accordingly. The reform focuses on lifelong learning as a foundation and is built on six major pillars. These are. Accountability, Curriculum Change, Innovative Pedagogies, Meaningful Assessment, Continuous Professional Development, Conductive Learning Environment and System Governance. The NYCBE focuses on;

1)   Enhancing access and relevance to Technical & Vocational Education & Training (TVET), including Polytechnic Education, and Higher Education programmed affiliated with the economic needs of the country.

2)   Enhancing the quality of basic education, low standards of which are the root cause of unskilled labour, unemployment, and rising inequality.

The reforms replaced the Certificate of Primary Education (CPE) with the Primary School Achievement Certificate (PSAC), eliminating competition at all levels. The NYCBE ensures that all youth reach at least the basic skill levels as per the international benchmark by 2030. The central mission of the NYCBE is to promote;

-    A socially and emotionally well-balanced, self-motivated individual, an autonomous lifelong learner engaging in a new way of creative and critical thinking, and a motivated individual in society.

-    An informed individual with the right attitudes and is concerned by the community and environment.

-    A productive individual with, the ability to work with new technological with new tools, communicates effectively, and works together in a conducive social environment to promote a global economy.
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The objectives of the NYCBE are:

-    Equip all learners with the knowledge, foundational skills, and attitudes to promote success in their future learning.

-    Inculcate in all learners a set of values and morals of responsibility.

-    Promote the holistic and complete development of learners.

-    Provide learning opportunities to all learners, including those with special educational needs.

-    Upgrade a smooth transition to secondary education.

-    Give greater recognition to value of TVET in building human capital that will head the transformation of the driven economy.
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The NYCBE reforms project aims for every child complete Nine years of quality basic education and deals with relevant learning outcomes whether it is General or Technical. The NYCBE is based on Six basic pillars. These are; Curriculum Change, Innovative Pedagogies, Continuous Professional Development, Assessment, System Governance, Accountability, and Developing a Learning Environment. The TVET has a vital role in the reform process to produce a skilled workforce that will boost economic growth. The reform involves different stages. These are;

1)   Stage 1. Primary School Readiness at the beginning of Grade 1. This stage determines to what extent learners have been successful in the transition from their pre-school experience to the primary school setup.

2)   Stage 2. Diagnostic Assessment at the beginning of Grade 3. This stage involves an evaluation process to identify learning shortfalls of learners after two years of primary schooling.

3)   Stage 3. Assessment at end of Grade 6. Primary School Achievement Certificate (PSAC). The CPE examination has been replaced by the new model of assessment; the PSAC aiming to assess learners holistically through School-Based Assessment Component.

4)   Stage 4. Assessment at the end of Grade 9. National Certificate of Education (NCE). At the end of Grade 9, learners are expected to part in a national assessment, the NCE, serving for progression of learners to upper secondary and orientation to either general or technical or vocational education.

5)   Stage 5. Assessment at the end of Grade 11. This stage is a process of two years of upper secondary (Grades 10 & 11) leading toward the School Certificate; O-Level qualification. This phase allows learners to be awarded an SC/O-level or an SC Technical or a National Vocational Qualification with options either to move to Higher School Certificate (HSC) or move into training centres, polytechnics for technical diplomas or enter the Labour market.

6)   Stage 6. Assessment at the end of Grade 13. Learners following the General Education stream follow an assessment at their end of Grade 13 to A-Level/Higher School Certificate or HSC Professional. This allows the learners to enter to Tertiary Education Institutions, Polytechnics, or Labour market.

To a summary of the NYCBE reform, it is to be noted that the new reform has introduced several core subjects such as English, French, Mathematics, Science, Technology, Commercial Studies, Social/Modern Studies, Visual Arts, and non-core subjects such as Performing Arts, Physical Education, Life Skills and Values. The reform expects all learners leaving the pre-primary sector to be ready for a sound primary school exposure, all learners to complete the NYCBE and have the foundation skills and attitudes for upper secondary schools, and universal secondary education is achieved with all learners completing secondary education successfully. The NYCBE is expected to attract the best and most highly graduates to the teaching profession, promoting all schools to be accountable for student learning and at last to push all graduates emerging from the TVET stream to a highly skilled labour market.

RECOMMENDATIONS

This paper proposes some basic recommendations that might bring a change in the implementation of the Nine Years Continuous Basic Education. Some of the proposals are:

1)   Co-education.
Co-education will bridge the gap of the subjects associated with gender bias since both boys and girls will have the same and equal opportunities for exploring their perspectives and organizing discussions and debates in classes in relation of the choice of subjects.

2)   Mixed-sex education.
It must be noted that learners in academic colleges and private schools are in a mixed-sex plan strategy teaching. However, for the mainstream, learners are still studying in single-sex education. The mixed-sex education molds learners as professionals in the labour market, averting sex stereotyping and discrimination. On the 23rd of September 2016, the New York Edition presented an overview of the report "The Pseudoscience of single sex schooling" published by eight social scientists of the American Council for co-educational schooling, declared that "*Boys who spend more time with other boys become increasingly aggressive and similarly, girls who spend more time with other girls become more sex-typed*".

3)   HSC Pro
HSC Professional Qualification (HSC Pro) is an alternative qualification to the traditional Higher School Certificate. It provides a pathway to those learners who after their School Certificate are looking for a specific course of study. One vital element of the HSC Pro to the learners is that they are made ready to join the labour market and by side continue further studies.

CONCLUSION

This study highlighted the main educational reforms that the Mauritian society has seen and the Mauritian children and adolescents have had to endure out of the political will and/or the educational myopia of policymakers and politicians. Many of the reforms had very laudable intentions in the interests of the students. However, many aspects of these reforms have also been left unaccomplished. Any reform in the education sector should imperatively focus on the student and their holistic development. Education is not a merchandise that any individual or part would put at stake, with the students being put at risk of academic failure, and hence, failure in life.

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