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Saint Kitts and Nevis

Education Policy Review

Final Report, March 2016

UNESCO
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Executive Summary

This report synthesizes the findings and corresponding policy recommendations of the Education Policy Review carried out by UNESCO in Saint Kitts and Nevis (SKN) during 2014 and 2015 at the request of the government. The education policy review is both an assessment of the strengths and weaknesses of the education system and a proposal of a set of recommendations intended to address the policy issues identified during the review process. At the government's request, the review covered four policy domains: (1) academic staff policy; (2) curriculum development; (3) teaching and learning environments in primary and lower-secondary education; and (4) governance, planning, management, funding, and monitoring and evaluation (M&E) policies. The selection of these policy domains aligns with the renewed emphasis placed on quality and equity by the new global education agenda, Education 2030.

Overall the education system in SKN appears fairly stable. It is largely funded by the government with an average expenditure of between 4% and 5% of its gross domestic product (GDP), similar to other Organisation of Eastern Caribbean States (OECS) countries. Although the 2008 crisis had an impact on public finances, SKN began to recover quickly and since 2011 has returned to its pre-crisis levels of public investment in education.

In terms of access, progress made over the last few decades has been remarkable, particularly in the context of the Caribbean subregion. Set against this success is a high drop-out rate that leaves a large number of young people, mostly boys, without the necessary minimum qualifications to enter a labour market that is increasingly in need of a highly qualified workforce. This high drop-out rate is also connected to social issues with implications for community cohesion and development. In addition, SKN, as with most other countries in the Caribbean, has not yet reached a significant level of access to higher education.

Inevitably, access issues are directly linked to equity. No disaggregated data are currently available for groups that are marginalized by social and cultural disadvantage, geographic isolation or other circumstances. The overall impression of the review team is that the country does not recognize these factors as having a major impact on education. Nevertheless, stakeholders are mostly convinced that socio-economic disadvantage is a driver of school failure.

In terms of quality, SKN has very good pupil–teacher ratios (14:1 for primary school and 8:1 for secondary school), but to take advantage of these conditions teachers need to be well-trained. So far this favourable ratio has not resulted in better educational outcomes: only 56% (55% in Saint Kitts and 62% in Nevis) of pupils complete secondary school with the widely accepted benchmarks defined in the Caribbean Secondary Education Certificate (CSEC) examinations. Although there is no shortage of teachers, pre-service teacher education and continual professional development deserve further attention and reinforcement, as already noted in government plans.

This overall perspective suggests that quality is an overarching issue in the education system of SKN. Despite impressive policy developments that have put in place mechanisms to deal with the monitoring and evaluation of student outcomes, teachers and schools performance, there is an implementation gap (as in many other policy domains) that prevents these mechanisms from having a real impact on improving students' learning. Partly because of this gap, but mostly because any improvement in learning opportunities and results is linked to how teaching and learning take place, UNESCO's education policy review focused on teaching and learning processes and three of the most important factors that influence them, either directly or indirectly. These three factors are: (1) teacher capacities; (2) curriculum; and (3) system capacity, including policy formation, planning, implementation and evaluation.

First, teacher quality is a significant contributor to quality education. High-quality teachers are more likely to yield high-quality graduates. This UNESCO review looked into teacher policies from three angles: supply, development and management. This is clearly a domain where SKN has to dramatically reform current provisions. While, as in many other countries in the Caribbean and beyond, teaching is far from being an attractive profession, more could be done to interest academically talented candidates to join the profession. Currently the entire system of initial teacher recruitment and subsequent provision, appraisal and management of turnover does not work to optimize the existing pool of teaching staff. The review team recommends, among other things, to first establish a National Teaching Council (NTC) to help the country define the necessary teacher profile and then determine how to train new candidates accordingly, how to assess the progress of in-service teachers within a structured programme against this profile, and how to provide them with adequate incentives to further develop professionally. In addition, SKN is in need of a coherent, data-informed system of teacher management.

The second factor that influences the quality of learning is curriculum. The review team found that the current curriculum is in need of an in-depth review followed by modernization in line with current social and economic development goals in

SKN. It was found that the current curriculum, mostly in lower-secondary but also in primary education, is narrow in perspective while at the same time paradoxically overloaded. It is necessary that the current curriculum shift, as it has already done in many countries in the region, from a content-based approach to a competency-based approach, which is in line with current international trends and reflected in international assessments. Such a shift would result in a more relevant and student-centred curriculum which could, in turn, have a positive impact on school drop-out rates. The lack of a competency-based approach can be also seen in the lack of emphasis on transversal skills. In light of these issues, the UNESCO review team proposes a profound review and reform of the curriculum and, simultaneously, the development of an overarching learning assessment policy that sets clear standards of competencies to be developed, rather than merely prescribing content to be covered.

Teacher quality interacts with the prescribed curriculum as well as other factors, some of which relate to students' families and socio-economic background. These complex interactions can be clearly witnessed in the classroom. During school visits the review team was confronted by an outdated, technology-poor learning environment, with teachers struggling to find time to fully cover a very overloaded curriculum while having to cope with administrative requirements that are not perceived as adding value to their main responsibility of fostering learning. Teachers experience a great deal of pressure from evaluation and supervision, yet it does not seem to result in better opportunities for improving teaching skills. Rather than being formative, evaluations seem to be mostly administratively driven and have no impact on practice. The UNESCO review team believes that a Quality Teaching and Learning Framework (QTLF), consistently coupled with the above-mentioned recommendations in the domains of teacher quality and curriculum, could help SKN to strengthen the modernization of teaching and learning, including more significant use of technologies to transform learning and improve student engagement.

Third, system capacities must be considered, as any policy recommendations have to be tested against existing capacities to duly formulate, plan, implement and assess policies. As with the education system itself, the SKN educational administration is stable but in need of modernization. The review team noted the following as the most salient policy issues: (1) an implementation gap, (2) the scarce use of data to inform policy-making and (3) an important issue of internal and territorial coordination between the two islands. A general lack of coordination within ministries and between line ministers seems to be hindering effective governance in terms of policy design and implementation. A basic requirement to address these issues is a reliable Education Management Information System (EMIS). The main benefit of an EMIS would be to provide policy-makers and stakeholders with data that could inform policy discussions as well as forward-looking resource planning, which is a critical

issue with regard to teaching staff and investments in infrastructure and resources. Without such a system the country is left 'working blind'. The review also considers that there is a need to better identify how effectively funds in education are being spent and how schools benefit from them.

Well-informed policies are needed, but they also need to be well-implemented. SKN has important, well-thought-out policy documents but seems to be facing a serious implementation gap that prevents them from being put into practice. The only way to address this implementation gap is to reinforce the capacities of the educational administration at the institutional, organizational and individual levels, the last having important implications for professional development and career opportunities. The balance between autonomy and accountability across the two islands poses an issue of coordination, which again shows the need to further develop system capacity as a prerequisite to distinguish between the technically feasible and the politically convenient.

This review clearly demonstrates that inclusiveness is a systemic issue worthy of greater attention, as the country's current practices tend to hinder rather than promote equitable educational opportunity. The systemic use of streaming (separating students into different curricular tracks) at a young age is an especially strong case in point, as the potential benefits in terms of learning outcomes might be outweighed by the negative implications for inclusion and equity.

To sum up, education in SKN has experienced major improvements over the past several decades. Yet, in a crucial moment for both social and economic development, the system is in need of reform. The country must seriously reflect on what kind of teaching and learning processes would suit its development needs, and align the most important components of the education system – namely teachers and curriculum – with this renewed vision of learning. In so doing, SKN will have to face the need to modernize its educational administration. This education policy review is an attempt to provide a strategic direction for SKN in accomplishing these goals. Despite numerous challenges highlighted, there is no question that SKN will continue to spearhead policy reform in the Caribbean region in the context of Education 2030.

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Acknowledgements

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Acronyms

ACARA	Australian Curriculum, Assessment and Reporting Authority
ACER	Australian Council for Educational Research
ADE	Associate Degree in Education
ADHD	Attention-deficit/hyperactivity disorder
AIDS	Acquired immune deficiency syndrome
AS	Academic staff (policy domain)
ASCD	Association for Supervision and Curriculum Development
AVEC	Advanced Vocational Education Centre
B.A.	Bachelor of Arts
B.Ed.	Bachelor of Education
BOSTES	Board of Studies Teaching and Educational Standards (NSW, Australia)
B.Sc.	Bachelor of Science
CAPE	Caribbean Advanced Proficiency Exam
CARICOM	Caribbean Community and Common Market
CBR	Country Background Report
CD	Curriculum development (policy domain)
CDU	Curriculum Development Unit
CERI	Centre for Educational Research and Innovation
Cert.Ed.	Certificate of Education
CFBC	Clarence Fitzroy Bryant College
CFS	Child Friendly Schools
CIA	Central Intelligence Agency (USA)
CPD	Continuing professional development
COL	Commonwealth of Learning
CSEC	Caribbean Secondary Education Certificate
CSME	Caribbean Single Market Economy
CXC	Caribbean Examinations Council
DET	Department of Education and Training (Australia)
DFID	Department for International Development (UK)
Dip.Ed.	Diploma of Education
ECCE	Early childhood care and education
ECD	Early childhood development
EFA	Education for All (UNESCO)
EHRSP	Education and Human Resources Strategy Plan (Mauritius)
EMIS	Education Management Information System
ETF	European Training Foundation
FS	Feasibility study

GDP	Gross domestic product
GEQAF	General Education System Quality Analysis/Diagnosis Framework
GER	Gross enrolment ratio
GP	Governance, planning, management, funding and M&E (policy domain)
GPO	Government Publishing Office (USA)
GTC	General Teaching Council (Scotland)
HDI	Human Development Index
HFLE	Health and Family Life Education
HIV	Human immunodeficiency virus
IAE	International Academy of Education
IBE	International Bureau of Education (UNESCO)
IBRD	International Bank for Reconstruction and Development
ICT	Information and communication technology
IEP	Individualized Education Plan
IIEP	International Institute for Education Planning (UNESCO)
IMF	International Monetary Fund
INSET	In-Service Education and Training (Zambia)
IPDAP	Initial Professional Development Action Plan (Scotland)
ITEN	Inter-American Teacher Education Network
KLA	Key Learning Area (NSW, Australia)
MCPE	Mandatory Continuing Professional Education (Nigeria)
M&E	Monitoring and evaluation
MIE	Mauritius Institute of Education
MOE	Ministry of Education
MOEHR	Ministry of Education and Human Resources (Mauritius)
NER	Net enrolment rate
NGO	Non-governmental organization
NIA	Nevis Island Administration
NIE	National Institute of Education (Singapore)
NSTP	National Skills Training Programme
NSW	New South Wales (Australia)
NTC	National Teaching Council
OAS	Organization of American States
OECD	Organisation for Economic Co-operation and Development
OECS	Organisation of Eastern Caribbean States
OERU	OECS Education Reform Unit
PE	Primary education
PETS	Public expenditure tracking survey
PFS	Pre-feasibility study
PISA	Programme for International Student Assessment
P/T	Pupil/teacher

PTA	Parent–Teacher Association
QLF	Quality Learning Framework
QTF	Quality Teaching Framework
QTLF	Quality Teaching and Learning Framework
SABER	Systems Approach for Better Education Results (World Bank)
SE	Secondary education
SEAT	SABER EMIS Assessment Tool
SELF	Student Education Learning Fund
SFR	Standard for Full Registration (Scotland)
SIDS	Small Island Developing State
SKN	Saint Kitts and Nevis
SMART	Specific, measureable, attainable, relevant and timely
TIS	Teacher Induction Scheme (Scotland)
TL	Teaching and learning environments (policy domain)
TRC	Teacher Resource Centre
TVET	Technical and Vocational Education and Training
UIS	UNESCO Institute for Statistics
UK	United Kingdom
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNESS	UNESCO National Education Support Strategy
UNICEF	United Nations Children's Fund
UPE	Universal primary education
USA	United States of America
USD	United States dollar
UWI	University of the West Indies
VARK	Visual–Auditory–Read/Write–Kinaesthetic

Introduction

Background

In 2014-15, UNESCO was tasked with carrying out an education policy review for Saint Kitts and Nevis (SKN). As part of this process, it was agreed that UNESCO and the Government of SKN would review and assess four education policy domains drawing on their sector priorities and provide a set of policy recommendations to contribute to educational development in the country.

These four policy domains are:

- Academic staff
- Curriculum development
- Teaching and learning environments
- Governance, planning, management, funding, and monitoring and evaluation (M&E) policies

The UNESCO policy review combined various sources of information:

- A Country Background Report (CBR), prepared by the national team (appointed by the national authorities) in accordance with UNESCO policy analysis guidelines (e.g. based on the UNESCO National Education Support Strategy [UNESS]), which is intended to provide baseline factual and descriptive information. The CBR is designed to help build empirical evidence about quality and equity in education in the Member State and incorporate the views of the national experts.
- A UNESCO benchmarking factsheet, which provides basic information about how the country's education system is performing in comparison to other countries.
- A UNESCO literature review of recent works on education policy in the country.
- A series of three missions: (1) scoping, (2) fact-finding and interpretation, and (3) validation. These missions involved cooperation between a national team and an international team. The international team was composed of UNESCO staff plus international experts in the policy domains considered critical for the improvement of the education system.
- A final report, which includes policy recommendations as well as specific actions for support, is the main outcome of the policy review.

As requested by the authorities, the review was conducted from a sector-wide perspective and thus included overarching aspects related to the planning and management of the education sector.

Structure of the report

Chapter 1 of this report presents an overview of the economic, social and human development context and characteristics of SKN, particularly those most relevant to the review, as well as an overview of the country's education system.

Chapter 2 presents an in-depth analysis of academic staff policy and deals with the main priorities in this area: quality, accountability, initial training, recruitment, retention, attrition and professional development.

Chapter 3 discusses the current state of curriculum development in the country and issues linked to it. Recommendations for curriculum development, implementation and assessment are provided.

Chapter 4 gives an insight into teaching and learning environments and covers impacts on teachers and students.

Chapter 5 analyses the performance of the education system as a whole, especially in terms of governance, planning, management, funding, and M&E policies.

A conclusion provides a brief overview of the underlying issues and recommendations as the necessary drive for the national authorities to improve the education system in light of the new international education agenda, Education 2030.

Review method

With the support of the Ministry of Education (MOE) and other ministries involved in education and training services, the policy review team adopted an external perspective to identify achievements, relative strengths, weaknesses and policy bottlenecks in the education system of SKN.

The methodology was based on empirical research – first on multiple contextual elements (including demography, economy and society) and then on the education system performance – using a variety of sources and methods, both quantitative and qualitative. The process involved in-depth analysis of policy documents, national background papers and international comparative data measuring the education system performance of SKN. This research was verified primarily through interviews

and consultations with ministerial officers from various divisions of the MOE and the Technical and Vocational Education and Training (TVET) Council, as well as other education stakeholders at central, state and district levels. These included officials, policy-makers and senior technical staff in the Ministry of Education and the Ministry of Youth, Sports and Culture; senior education officers; the Core Planning Team; the National CBR Review Team; and the Curriculum Development Unit (CDU) – as well as school heads, teachers and students at primary, secondary and post-secondary levels; school principals; school guidance counsellors; teachers' unions; employers; and public sector representatives.

Field data elicited from each of these stakeholders, together with prior research, provided the foundation for identifying both domain-specific and cross-cutting issues, without the imposition of any explicit theories for interpreting the data.

Through interpretation of contextual elements (demography, economy and society), analysis of the education system performance, and verification of findings through stakeholder interviews, the review was able to develop the series of recommendations presented herein, which address the issues identified in each domain.

The weight or significance of these recommendations has also been measured against criteria of cost, difficulty, priority and the estimated time needed for implementation.

Boundaries and limitations

While the final report is based on extensive research and numerous interviews held during several field visits, it is by no means an exhaustive analysis of the issues at play. Such an analysis, were it possible, would require much greater access to primary data, a longer timeframe and broader consultations with stakeholders, in particular non-state actors. Such an approach is not feasible in a study designed to provide an external review of only the most pressing issues in each of the four selected policy domains.

In addition, the review team sometimes found it difficult to gain access to written policy documents, which means that they often had to rely on interviews from government officials in regard to policy details and objectives. This may have introduced some bias into the analysis. The lack of available data also made it difficult to reference specific information to validate findings. This in turn created difficulties in distinguishing between ambitions, goals and initiatives already implemented by the MOE. It was often found that potential issues had already been identified and plans put in place to address them, but that the degree of success was difficult to quantify. Hence further areas for research have been identified by the review team.

Since the review focused primarily on the four selected themes, the issues of student drop-out rates and equity in education provision deserve further attention. These issues have been duly reflected in the recent Education Sector Diagnosis document and will be further addressed in the upcoming five-year strategic planning process.

This final report is designed to contribute to the next five-year strategic planning process for the education sector in the context of the Education 2030 agenda, by providing a solid platform upon which updated and ongoing analysis of the most pertinent issues identified here can be built. With a window opened to potential reform, it is hoped that this review will provide the needed impetus for national actors to address fundamental issues and press forward in achieving their national vision for education.

Chapter 1
Background and overall assessment of the education system

Background and development context

Overview

The Federation of Saint Christopher and Nevis, also known as the Federation of Saint Kitts and Nevis and abbreviated here as SKN, is a federal two-island Caribbean State, and is part of the West Indies. The capital city, Basseterre, is located on Saint Kitts, while Charlestown is the largest city on Nevis.

England and France ran Saint Kitts jointly from 1628 to 1713. The Treaty of Paris (Versailles) in 1783 awarded both islands to Great Britain.

The islands became an associated State of the United Kingdom with full internal autonomy in 1967. SKN obtained independence in 1983, and has remained a constitutional monarchy with Queen Elizabeth II as the head of State.

The country adopted the Saint Christopher and Nevis Constitution Order in 1983. According to the current Constitution, the Government of SKN is the highest governing authority of the federation, while the island of Nevis, locally governed by the Nevis Island Administration (NIA), has some level of autonomy (including the provision of education services and management of the education system).

SKN is a sovereign, democratic and federal State with a Governor-General who represents the Queen, a Prime Minister who leads the majority party of the House, and the Cabinet, which is in charge of State affairs.

The National Assembly of SKN is a unicameral legislature, which is composed of 11 elected Representatives and three Senators appointed on the basis of recommendations by the Prime Minister and the leader of the opposition party.

SKN joined the United Nations in 1983. The country is also a full member of the Caribbean Community and Common Market (CARICOM), the Organization of Eastern Caribbean States (OECS) and the Organisation of American States (OAS).

Demography[1]

According to the latest estimates, SKN has a population of 56,000 (UN Population Division, 2015). The average annual population growth rate has been 1.1% (between 2010 and 2015) (UN Statistics Division, 2014). According to the latest population data from the World Bank, the country ranks 51st in the world in terms of population density, with 211 people per square kilometre (World Bank, 2016). In terms of the total area, SKN covers only 261 square kilometres, which makes it 207th in the world for size (World Population Review, 2014). Within the population, 32% of people live in urban areas, and the average growth rate for the urban population is about 1.3% per year (UN, 2016). The capital, Basseterre, is the largest and most populated city in SKN, with around 14,000 inhabitants.

The majority of the population of Saint Kitts and Nevis (75%) is of African descent. The second largest ethnic group is Afro-European (12.3%), followed by East Indian and Afro-East Indian (5%), South Asian (3%) and other ethnic groups (3%) (World Population Review, 2014). Most of the population are descendants of West African slaves. In terms of impact on the education system, it is important to consider the increase in the number of people from the Dominican Republic whose first language is not English. People aged 14 and below make up 28% of the total population, and the rural population represents 68% of the total (which is a relatively large proportion) (UIS, 2014).

Economy

Saint Kitts is characterized by large fertile tracts of land, good weather and a steady pattern of rainfall. Since the seventeenth century, the Kittitian economy has been dependent on the sugar industry. In the 1980s, tourism and manufacturing sectors developed slowly as alternatives to the sugar industry, although the latter continued to be the primary foreign source of income. One of the government's priorities was to diversity types of products within the agricultural sector, including fresh produce.

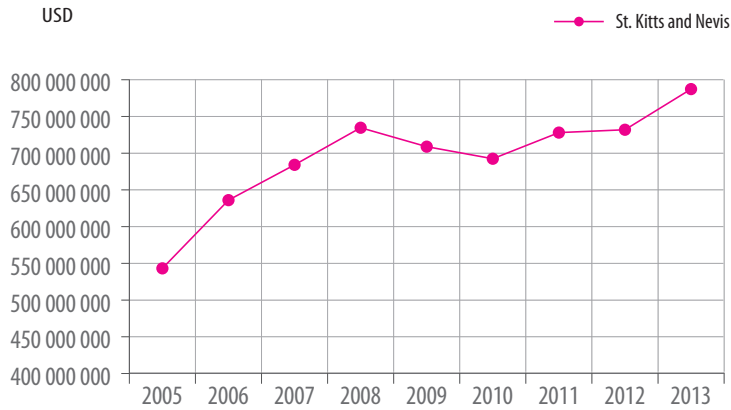
Nevis was valued for its seclusion and beaches rather than for agriculture, which was the prime reason for growing the international tourist market in the late twentieth

1 Based on information from the UNESCO Institute for Statistics (UIS), the United Nations Statistics Division, and the World Population Review.

century. One of its primary export commodities was Sea Island cotton (extra-long staple cotton). However, the cotton caused serious soil erosion (Meditz and Hanratty, 1987).

In the mid-1980s, the government prioritized tourism, light manufacturing and the scaled-down sugar industries as the prime sources of income. In 2008, gross domestic product (GDP) was affected by the international financial crisis but has been recovering since 2011. In 2013, GDP at market prices was US$787 million (current USD), with real GDP growing by 1.6% on the back of a recovery in tourism and a strong upturn in construction (World Bank, 2016). Figure 1 presents the GDP trends between 2005 and 2013 (with increases observed from 2005 to 2008).

Figure 1 Saint Kitts and Nevis GDP in current USD for 2005-2013

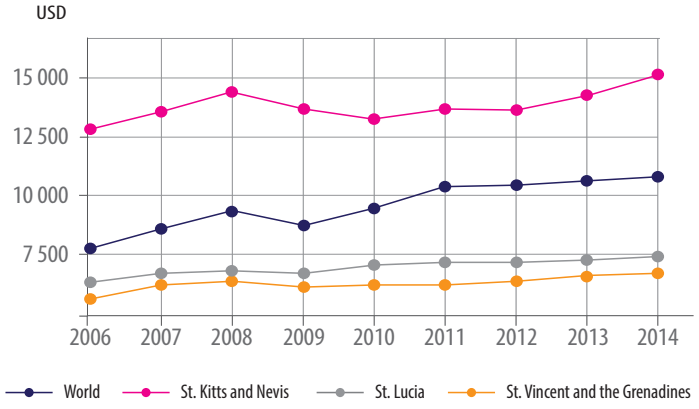


Source: World Bank, 2016.

According to the 2009 SKN Labour Market Assessment, 68% of the population (24,958 out of the 36,543) were employed; 5% (1,736) were unemployed and 27% (9,849) were not in the labour force (UNESCO, 2014b). Unemployment, according to the Country Background Report, is relatively high for those in the 16-24 age group. This may be due to the fact that many students leave secondary school with low levels of attainment and no appropriate qualifications to enter the labour market.

As shown in Figure 2, SKN has a higher GDP per capita than the neighbouring Caribbean countries of Saint Lucia and Saint Vincent and the Grenadines. GDP per capita is also higher than the world average.

Figure 2 Saint Kitts and Nevis GDP per capita (current USD)

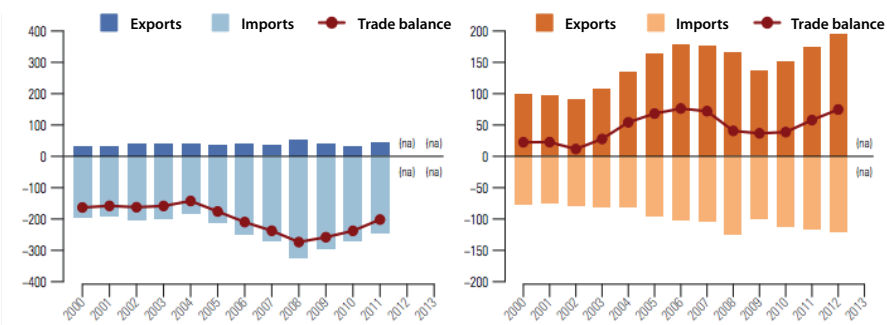


Source: World Bank, 2016.

Following the global financial crisis in 2008, which affected SKN and led to budget cuts in sectors including education, the tourism-dependent and highly indebted economy has been recovering in recent years. In 2013, the GDP growth rate of Saint Kitts and Nevis stood at 1.9%, which was considerably higher than the 0.9% recorded in 2012 (CIA, 2013).

SKN is largely dependent on imported machinery, manufactures, food and fuel. In 2013, the government spent US$355.4 million on importing goods and commodities, and just US$57.3 million exporting goods and commodities (UN Comtrade, 2014; UN Service Trade 2014).

Figure 3 Total merchandise trade and total services, by value (minimum USD per year)



Source: UN Comtrade, 2014 and UN Service Trade, 2014.

To compensate for lost jobs, the government has initiated a programme to diversify the agriculture sector and stimulate other sectors of the economy (such as export-oriented manufacturing and offshore banking) (CIA, 2013).

As indicated in Table 1 below, in 2013 SKN was ranked 73rd on the Human Development Index (HDI) and the HDI value was 0.750. The ranking remained the same for 2012 and 2013.

Table 1 Saint Kitts and Nevis Human Development Index for 2013

Human Development Index and its components							
HDI rank	Human Development Index	Life Expectancy at birth	Means years of schooling	Expected years of schooling	Gross National Income (GNI) per capita	Human Development Index (HDI)	Change in rank
	Value	Years	Years	Years	(2011 PPP$)	Value	
	2013	2013	2012	2012	2013	2012	2012-2013
73	0.75	73.6	8.4	12.9	20,150	0.749	0

Source: UNDP, 2013.

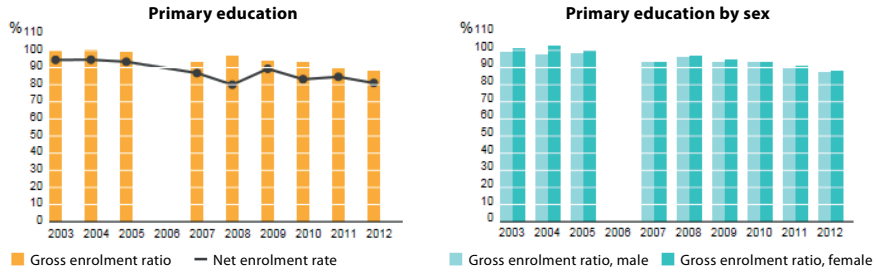
Overview of the education sector

Background

Since 1967, SKN has replaced the former education structure, which had been inherited from the British colonial period (Commonwealth Secretariat, 2012). Its current education system consists of 12 years of compulsory education from age five to age 16, including primary education until the age of 12, followed by secondary education (divided into three years of lower secondary and two years of upper secondary) until the age of 16. The literacy rate in Saint Kitts and Nevis is relatively high (97.8% in 2003) (CIA, 2013).

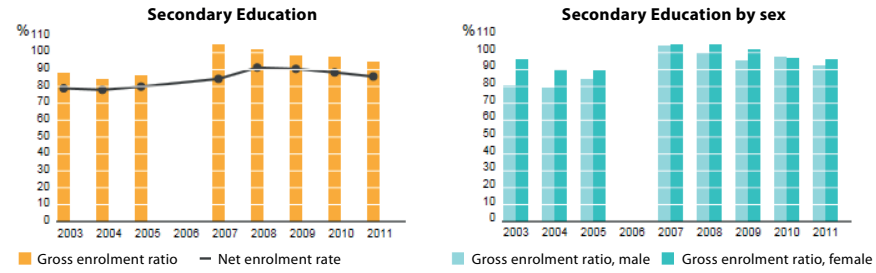
The primary gross enrolment ratio (GER) in 2014 was 84.5% for girls, and 83% for boys (UIS, 2014). The GER for secondary education was 93% for girls and 90% for boys. The graphs in Figures 4 and 5 below show that gender parity has almost been achieved at the primary and secondary levels.

Figure 4 Primary gross enrolment in Saint Kitts and Nevis



Source: UIS, 2014.

Figure 5 Secondary gross enrolment in Saint Kitts and Nevis



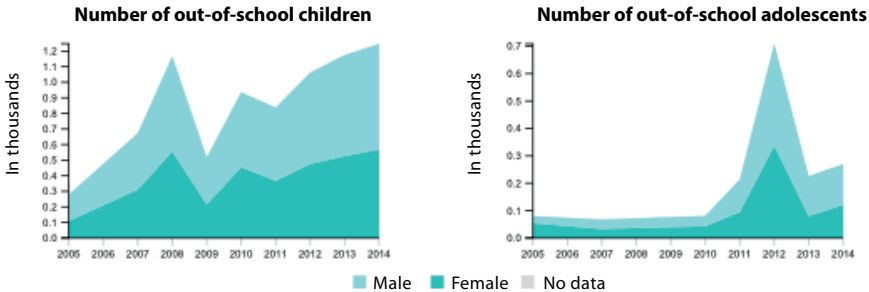
Source: UIS, 2014.

Grade repetition is a major concern for most Caribbean countries. In SKN, while overall levels of repetition are low in comparison to the region, the repetition rate between 1999 and 2009 has constantly edged up, signalling issues with internal efficiency.

SKN also faces the problem of early school leaving, with 14% of primary students dropping out before last grade (UNESCO, 2014b). Data are not available on the real number of out-of-school students at the secondary level. However, according to the Country Background Report, only about 71% of a cohort sits Caribbean Secondary Education Certificate (CSEC) examinations, which are designed for Caribbean students who complete Form 5 at the secondary level. If this cohort is representative, almost 30% of secondary students will not complete the final grade. Based on data

from the UNESCO Institute of Statistics (UIS) show in Figure 6 below, boys are more likely to drop out than girls.

Figure 6 Out of school children in Saint Kitts and Nevis



Source: UIS, 2014.

Two types of learning institutions provide education in SKN: public educational institutions and private learning centres. Different programmes are designed based on the concrete needs of children and young people. In addition to its compulsory education system, children in the age group 0–5 years can enrol in Early Childhood Development (ECD) centres that are mainly run by private institutions. Students who leave school at or before the fifth year of secondary education can choose to enrol in skill-based programmes or training centres, in order to develop more targeted skills that are not taught in formal schools (Commonwealth Secretariat, 2012).

Students at the end of secondary education can sit the CSEC examinations at the general, technical or basic proficiency level. These are administered by the Caribbean Examinations Council (CXC). Those who wish to proceed to the Clarence Fitzroy Bryant College (CFBC) in Saint Kitts or the Nevis Sixth Form College need to have at least five subjects passed at CSEC. The Advanced Vocational Education Centre (AVEC) provides TVET education for students who want to enter the world of work or who have not been successful at the CSEC level. This is also the matriculation requirement for technical education at the CFBC (UNESCO-IBE, 2011).

In 2005, a new Education Act became the legal framework for policies and provisions of compulsory education in SKN. The specific goals and objectives outlined in the 2005 Education Act provide clear guidelines on the kinds of citizens that the education system intends to produce (MOE, 2009). The goals and objectives of the Act are:

1. The establishment and strengthening of a varied and comprehensive educational system that is based on societal needs
2. The provision of access to quality education for all the nationals of Saint Kitts and Nevis in institutions that foster the spiritual, cultural, moral, intellectual, physical, social and economic development of the individual and of the community

Specifically, the objectives of the education system are to:

a. Encourage and promote the development of basic knowledge and skills in all persons, including:
    i. the skills of literacy, listening, speaking, reading, writing, numeracy, mathematics, analysis, problem-solving, information processing and computing
    ii. critical and creative thinking skills for today's world
    iii. an understanding of the role of science and technology in society, together with scientific and technological skills
    iv. appreciation and understanding of creative arts, and
    v. physical development and personal health and fitness, and the creative use of time
b. Develop self-worth through positive educational development
c. Promote the importance of the family and community
d. Provide opportunities to reach maximum potential
e. Promote recognition, understanding and respect for the Constitution, laws and national symbols of the State
f. Develop an understanding of the principle of gender equality and other forms of equality as defined in the Constitution
g. Promote an understanding of the history, language, culture, rights and values of Saint Kitts and Nevis and their role in contemporary society
h. Increase awareness and appreciation of the natural environment
i. Promote a national and Caribbean identity through regional cooperation and integration
j. Develop an understanding of the historical and contemporary role of labour and business in society
k. Prepare for participation in the affairs of Saint Kitts and Nevis and the global society

Education development is guided by an overarching education policy document created in 2009: the White Paper on Education Development and Policy 2009–2019 (MOE, 2009). Since 2009, a number of relevant education policies have been established, but the White Paper remains the primary guiding document for education policy and practices in the country.

Education budget

The government devotes around 13% of its total expenditures to education, which amounts to approximately 4.2% of GDP (World Bank, 2016; Rossel-Cambier and Romagnoli, 2009). In 2009 its budgeted education expenditure was estimated at 4.63% of GDP, which was above the average rate for other Eastern Caribbean countries at that time (Rossel-Cambier and Romagnoli, 2009).

Table 2 Public expenditure on education in the Eastern Caribbean, 2009

Country	Public expenditure on educatin as % of GDP	Public expenditure on education as % of total government expenditure
Barbados (2009)	4.66	16.97
BVI (2009)	1.84	15.2
Dominica (2002)	5.12	n.a.
Grenada (2009)	2.47	16.28
Montserrat (2006)	3.35	n.a.
Saint Kitts & Nevis (2009)	4.63	13.38
Saint Lucia (2009)	3.43	13.78
Saint Vincent & the Grenadines (2009)	4.11	16.32
Turks and Caicos Islands (2006)	n.a.	11.76

Source: Rossel-Cambier and Romagnoli, 2009.

However, the global financial crisis since 2008 has had a negative impact on the country and government budget. This was evidenced in the reduction of the share of government financing allocated to educational projects. The education budget for 2010 was cut by about 5%. According to the World Bank's 2009 assessment, 'despite the Government's strong financial commitment to the education sector, limited fiscal space could pose a risk to maintaining the ongoing educational project's achievements of the state' (World Bank, 2009).

Role of the government and structure of the Ministry of Education

The MOE is the main provider of education in Saint Kitts, while the NIA is responsible for the administration of education on the island of Nevis.

Within the framework of the 2005 Education Act and the 2009 White Paper on Education Development and Policy, a variety of education units or sections have been set up in the Departments of Education, including:

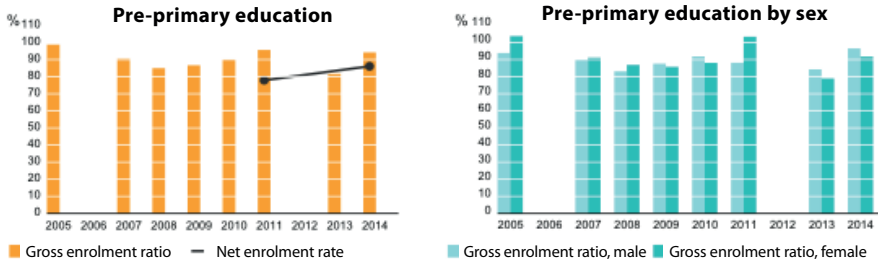
- **Curriculum Development Unit** for national curriculum planning
- **Special Education Unit** for children with mental or physical challenges
- **Early Childhood Education Unit** for the management and delivery of early childhood services
- **Examinations Section** for the management of the national examination system
- **Advanced Vocational Education Centre, National Skills and Project Strong** for the skills training programmes
- **Accreditation Board**, which is responsible for evaluating applications for accreditation and monitoring quality assurance of tertiary-level institutions
- **School Management Teams and Principals** for day-to-day school management
- **TVET Council,** responsible for technical and vocational education and training

Structure of education in Saint Kitts and Nevis

Early childhood care and education

Children who are under 3 years old can enrol in nursery centres, and those aged 3 to 5 can attend pre-school centres for a two-year preparatory programme. There are also day care centres, which have a nursery and a pre-school (for children aged 0-5).

Figure 7 Pre-primary gross enrolment in Saint Kitts and Nevis



Source: UIS, 2014.

With 11.6% of its education budget dedicated to early childhood care and education (ECCE), SKN has the highest gross enrolment rates for ECCE among the Eastern Caribbean countries (UNESCO, 2014a).

Primary education

Compulsory primary education, designed for children aged 5 to 12, lasts seven years and is divided into three sections:

- Infant department (kindergarten, Grades 1 and 2)
- Lower primary (Grades 3 and 4)
- Upper primary (Grades 5 and 6)

Progression through grades is automatic but pupils' performance in the Grade 6 Test of Standard is used to assist schools in the placement of students in ability streams in Form 1 of secondary school (UNESCO, 2014b, p. 31). The core subjects of primary education are mathematics, language arts, social studies and science, with additional subjects such as music, environmental education and physical education (UNESCO-IBE, 2011).

Secondary education

Secondary education in SKN lasts five years and is also part of the compulsory education system. It is divided into lower secondary (Forms 1–3) and upper secondary (Forms 4 and 5). The CXC offers 31 subjects for CSEC examinations, and the regional indicator for success at CSEC is four subjects.

Special education

There are two institutions that cater to students with special needs that cannot be accommodated in mainstream schools: the Cotton Thomas Comprehensive School in Saint Kitts and the Ciciely Brown Integrated School in Nevis. The 2005 Education Act recommends the development of Individual Education Plans (IEPs) for students with special needs. Each plan should be developed by an IEP team, which should include the parents, teacher, principal and other support staff who interact with the child (UNESCO-IBE, 2011).

Post-secondary/non-tertiary

Post-secondary and tertiary education is mainly provided by the Clarence Fitzroy Bryant College on Saint Kitts. It offers different courses leading to the Caribbean Advanced Proficiency Exam (CAPE), certificates, diplomas and associate degrees in various fields, including arts and general studies, teacher education, health sciences, technical and vocational education, management studies and so forth. The CFBC also has some arrangements with institutions of higher education, such as University of the West Indies (UWI) and the University of the Virgin Islands. The credits obtained at CFBC can be transferred into Bachelor's degree programmes in those universities. The University of the Virgin Islands also offers a Master's degree programme for CFBC students using video conferencing technology (UNESCO-IBE, 2011).

The Nevis Sixth Form College offers CAPE certification for local students (UNESCO, 2014b).

Besides these two main institutions, students can also attend the Advanced Vocational Education Centre, the National Skills Training Programme (NSTP) or other skill training programmes, both formal and non-formal, which will lead them directly to the world of work (UNESCO, 2014b).

Essential education indicators at primary and secondary levels in the Eastern Caribbean region are listed in Table 3 below to provide comparative perspectives. These include indicators of investment in education, such as the percentage of GDP spent on education at various levels; indicators of access such as enrolment and literacy rates; indicators of quality, such as pupil–teacher ratios; and indicators of outcomes such as graduation and repetition rates. Data were taken from the most recent year available, ranging from 2003 to 2012 depending on the indicator and the country.

Table 3 Education indicators across the Eastern Caribbean region

	Saint Kitts and Nevis	Anguilla	Antigua & Barbuda	British Virgin Islands	Common-wealth of Dominica	Grenada	Monts–errat	Saint Lucia	Saint Vincent & the Gren-adines
Investment in education									
% of GDP	4.2%	2.8%	2.5%	4.4%	5%	3.9%	5%	4.1%	5.1%
% in PE	14.6%	51%	41%	34%	–	36%	20%	40%	2.1%
% in SE	44.9%	53%	48%	33%	–	35%	29%	45%	36%
% in HE	23.1%	2.8%	7.4%	33%	–	9.8%	5.5%	5%	7%
Per child (PE)	–	–	US$ 1687.21 million	–	US$ 1922.97 million	US$ 789.87 million	N/A	US$ 1801.48 million	US$ 1845.8 million

	Saint Kitts and Nevis	Anguilla	Antigua & Barbuda	British Virgin Islands	Common-wealth of Dominica	Grenada	Monts–errat	Saint Lucia	Saint Vincent & the Gren-adines
Access									
GER/ NER in PE	94% / 87%	94% / 92%	97% / 85%	91% / 81%	119% / 91%	103% / 87%	106% / 92%	87% / 81%	105% / 94%
GER/ NER in SE	97% / 88%	79%/ 80%	113% / 74%	109% / 93%	106% (2011) & 94%	120% (2010) & 89% (2005)	101% (2007) & 91% (2007)	90% (2012) & 88% (2012)	110%(2012) & 94% (2010)
% out-of-school PE / SE	14% / 3%	7% / 20%	14% / 25%	15% / 6%	3.7% / 5%	2.5% / 11%	3.8% / 9%	17% / 12%	0.8% / 5%
Adult literacy	97.8%	–	98%	–	–	–	–	–	–
Access to ICTs (% of the population)	79.4%	–	–	–	–	–	–	–	–
Quality									
P/T ratio in PE	14	14	13	11	16	16	13	17	16
P/T ratio in SE	9	–	11	9	14	13	15	14	18
Outcomes									
Survival to the last grade in PE	–	86%	91%	–	88%	–	–	89%	68%
Transition rate from PE to SE	95%	97%	–	87%	99%	87%	–	96%	95%
Graduation rate from lower SE	77%	92%	91%	92%	99%	123%	–	93%	112%
Repetition rate PE / SE	2% / 3%	0.2% / –	3.9% / 9.5%	– / 8.7%	4.2% / 7.9%	3.4% / 10.1%	–	2.2% / 0.6%	4.4% / 13.7%

PE: Primary education / SE: Secondary education / HE: Higher education
GER: Gross enrolment ratio / NER: Net enrolment rate
P/T: Pupil/teacher / ICT: Information and communication technology

Source: UNESCO, 2014a; UIS, 2014.

Opportunities and challenges

Access

A fundamental goal of education as stipulated in the 2005 Education Act is to 'provide access to high-quality education for all nationals in institutions that foster the spiritual, cultural, moral, intellectual, physical, social and economic development of the individual and the community'. The White Paper on Education Development and Policy (MOE, 2009) stated that 'this generation of school children has much better access than their predecessors to education, healthcare and other social services'. The White Paper describes the problems of access to higher education in SKN, which include an insufficient number of spaces, students graduating from secondary school without the necessary qualifications to access this level of education, and a lack of marketing to promote higher education in the country.

Equity

There are gender disparities in favour of girls with respect to access and participation in education (UNESCO, 2014b). Boys are likely to leave school earlier than girls in compulsory education. No disaggregated data are currently available for socially and culturally disadvantaged groups, geographically marginalized groups and other groups.

Quality and learning outcomes

The pupil–teacher ratio is 14:1 for primary and 9:1 for secondary. Although there is no shortage of teachers and the number of teachers is considered to be sufficient, pre-service teacher education deserves more attention and needs to be reinforced. It was projected that teachers would have at least a certificate in teacher education by the end of 2014, but this has not materialized (UNESCO-IBE, 2011). There is limited information about the availability of textbooks. Only 56% (55% in Saint Kitts and 62% in Nevis) of pupils complete secondary school with four CSEC subjects passed (UNESCO, 2014b).

Cost and financing in education

The government spends on average 4.2% of its GDP on education (World Bank, 2016). Similar percentages are observed in other OECS countries. Education is predominantly funded by the government. No official data are available concerning external funding in education by development partners.

Internal efficiency

As in the case of the other Eastern Caribbean States, the country's grade repetition rates reached 2% in primary and 3% in secondary education in 2011 (UNESCO-IBE, 2011). While the education system adopts an automatic promotion policy to the next grade, repetition is at the discretion of each school in consultation with parents.

Monitoring and evaluation

The education monitoring and evaluation system is not functioning optimally. Although the Education Management Information System (EMIS) exists, the current system does not fully capture a wide range of information and data for education system management and planning. The basic M&E structure for the educational process is carried out through school supervisions, school performance reviews, clinical supervisions and a teacher appraisal system. Ministry officials, principals and other non-classroom teaching professionals (e.g. guidance counsellors) are not included in the current evaluation system.

For primary education, Test of Standards scores are used to evaluate student performance annually. The CXC Caribbean Primary Exit Assessment is slated for implementation but has not yet been introduced. At secondary level, the assessment system does not fully capture students who do not sit the CSEC examinations (UNESCO, 2014).

Governance

The education system is highly centralized, owing to the nature and size of the country. The system is solid yet not up-to-date. It is essentially a paper-based system, with a general lack of forward-looking resource planning and management or e-governance. Although there is a wide of range of educational policies, there are very few actions to implement current policies and practices. The system requires a substantial review of governance in education, particularly in terms of leadership and accountability (including the necessary delegation of authority). The system needs to raise levels of equity and efficiency in the provision of education.

Chapter 2
Academic staff

Introduction

Academic staff policy issues are characterized by a dynamic interplay of significant factors affecting decision-making, practices and procedures related to teachers. Mulkeen (2010, p. 8) identifies four interrelated dimensions that present challenges to the development of teacher policies: supply, distribution, quality and cost. Decision-making usually involves considerations of these competing areas and a balance of trade-offs that inevitably must be made in the light of the contextual realities. Although this review is carried out from the perspective of teacher quality – in keeping with SKN's goal of quality education provision – the decisions that result from its recommendations will no doubt reflect the challenges and trade-offs inherent in the process of teacher policy decision-making.

Recent initiatives in teacher policy development in the CARICOM region have been aimed at improving teacher quality and enhancing the image of teaching as a profession. Countries where teaching enjoys a high status as a profession and career choice have teacher policies that provide for the following:

- Professional autonomy for teachers
- Shared responsibility in decision-making on matters of teaching and learning and curriculum development
- Career development opportunities
- Performance management

Teacher quality is a significant contributor to quality education. High-quality teachers are more likely to yield high-quality graduates from the education system, as research findings link teacher quality with student achievement (Darling-Hammond, 2000; Buchberger et al., 2000; Wenglinsky, 2002). Providing access to quality education is a stated goal of the education system in SKN. The vision and mission of the MOE, as stated in the 2009 White Paper, spell out the expected outcomes implicit in this goal (MOE, 2009). Teacher policies must enable the realization of these outcomes. The overarching aim of teacher policies in this regard is to identify, develop and sustain high-quality teachers. The 2013/14 Education for All (EFA) Global Monitoring Report noted that that 'strong national policies that make quality teaching and

learning a high priority are essential to ensure that all children in school actually obtain the skills and knowledge they are meant to acquire' (UNESCO, 2014a).

There are several factors that contribute to teacher quality. These factors have been identified in the Framework Paper of the World Bank's Systems Approach for Better Education Results (SABER) Teachers Initiative (Vegas et al., 2013), and expressed as broad goals for teacher policy development and analysis. The SABER policy goals are (ibid., p. 22):

- Setting clear expectations for teachers
- Attracting the best candidates into the teaching profession
- Preparing teachers through useful training and experience
- Matching teacher skills with student needs
- Ensuring strong leadership
- Monitoring teaching and learning
- Supporting teachers to improve instruction
- Motivating teachers to perform

These teacher policy goals have been used as a framework for interpreting the issues related to teacher policies in the national education system, as highlighted in the CBR and further determined by follow-up interviews with stakeholders.

This review organizes teacher policy issues under three broad policy domains: teacher supply, teacher development and teacher management. The table below shows the relationship between SABER policy goals, teacher policy domains and teacher policy issues that were identified in SKN.

Table 4: Teacher policy domains and related SABER goals and SKN issues

Policy Domains	SABER Teacher Policy Goals	Teacher Policy Issues
Teacher supply	• Attracting and recruiting the best candidates into teaching • Matching teacher skills with student needs • Motivating teachers to perform	• Attracting suitably qualified people into teaching • Teacher recruitment practices • Deployment and utilization of teachers • Teacher retention and attrition
Teacher development	• Preparing teachers through useful training and experience • Supporting teachers to improve instruction	• Initial training procedures and programme • Continuing professional development
Teacher management	• Setting clear expectations for teachers • Ensuring strong leadership • Monitoring teaching and learning	• Teacher evaluation: teaching performance and teacher appraisal • Quality assurance and accountability

The remainder of this chapter discusses the most salient teacher policy issues identified in SKN and the corresponding policy recommendations.

Policy Issue 1: Attracting suitably qualified people into teaching

In meetings with stakeholders, concerns were expressed about the academic profile of people entering the teaching profession, which was seen to be contributing to teaching quality issues in schools. The issue is complex, in that recruitment for employment as a teacher precedes selection for training. Entry requirements are mainly academic qualifications, and these are minimal. The stakeholders also expressed their concern with the lack of commitment to teaching as a career of choice, citing the high turnover of teachers as evidence.

The CBR identified several related issues: the need for policies on the recruitment and placement of academic staff; the need for more trained and academically qualified teachers; and the underrepresentation of men in teaching and school leadership (UNESCO, 2014b, p. 59).

Evidence

In keeping with the Harmonized Policy Framework for Teacher Education in the Caribbean (Mark et al., 2005), the main objective of the MOE's 2009 White Paper on Education Development and Policy is the implementation of strategic planning to recruit top-quality teachers. The intention is to attract people with a genuine desire for classroom teaching and a clear commitment to teaching as a career and as a social service (MOE, 2009, p. 19). However, there is no distinction between recruitment into the profession and recruitment into teaching, since teachers are selected for employment and then given initial training after they take up positions in schools.

Pupil–teacher ratios are among the lowest in the region, yet the country has the second-highest rate of out-of-school students at the primary level (UIS, 2014), and 29% of secondary students leave school without attaining benchmark achievement levels. Approximately 50% of students leave school with the accepted level of achievement in English and 35% in Mathematics (UNESCO, 2014b). While there are other contributing factors, these data support the findings of comparative studies linking student outcomes with the level of academic achievement of teachers entering the profession.

Discussion

Comparative studies on teacher quality and international assessments of achievement reveal commonalities among high-achieving countries in terms of the quality of people entering the teaching profession. In these countries, teaching is seen to be a high-status profession, and teachers are recruited from the same pool as other top professionals. Quality teaching in schools is facilitated when people with high-level knowledge and skills are motivated to choose teaching as a career. Talented people will choose a career in teaching if it is seen to be competitive with other occupations. Aggressive recruitment strategies that promote teaching as a noble and rewarding profession can widen the catchment of persons attracted to a teaching as a career. Selective recruitment that targets high-achievers, competitive compensation and career diversity can enhance the status of teaching (OECD, 2011a, p. 7).

Identifying and nurturing teaching talent can also boost the status of teaching, as seen in the case of Singapore. Prospective teachers are selected from the top third of students graduating from secondary schools. Interest in teaching is fed through teaching internships for secondary-school students. Strong academic ability and commitment to teaching as a career are the principal criteria for selection for initial training. After three years, annual teacher evaluations are used to channel practitioners into a career path (OECD, 2011a, p. 9; Butrymowicz, 2014).

POLICY RECOMMENDATIONS

There is a need for SKN to put measures in place to enhance the social status of teachers and the prestige of the teaching profession. Teacher policies influence perceptions of the status of teachers and the teaching profession. In turn, the status ascribed to teachers and the teaching profession is manifested in the policies that govern teachers and teaching. There are several policy options open to the government of SKN for enhancing the status of teaching and making it more attractive as a career. These options revolve around changing the perception that teaching is a step on the way to a real career or profession by giving it status equivalent to other more attractive professions.

RECOMMENDATION 1.1 RAISE THE BAR WITH RESPECT TO THE REQUIREMENTS FOR ENTRY INTO TEACHING

High-prestige professions have rigid entry requirements and selection criteria for initial training, making them highly competitive yet more attractive at the same time. Selection for initial training presupposes that the programme will be a requirement for certification and eligibility for recruitment into the teaching service as a practitioner. The Harmonized Policy Framework for the Teaching Profession

in the Caribbean recommends that 'recruitment into the teaching service must be contingent upon the successful completion of an accredited programme of initial preparation. This programme must graduate professionals at the Baccalaureate level' (Mark et al., 2005, p. 20). Low entry requirements, especially if these do not include professional qualifications, reinforce the perception of low worth.

The policy move to Baccalaureate academic and professional qualifications should be flexible enough to allow for different configurations of these qualifications. Initial professional education for teaching may normally be acquired through either of these paths:

- An accredited teacher preparation programme at the baccalaureate or undergraduate level of tertiary education (B.Ed., or B.A./B.Sc. in Education)
- An accredited teacher preparation programme at the post-graduate level of tertiary education (Post Graduate Dip.Ed. or Post Graduate Cert.Ed.)

Additionally, there may be alternative requirements via special programmes to facilitate specific needs, for example, in times of acute teacher shortages, or for curriculum areas that are difficult to service. Other considerations include the redesign of the programme at the CFBC to reflect the new entry requirements and the shift to pre-service initial professional education and certification. The Harmonized Policy Framework also recommends a set of criteria to guide the selection process for initial training (Mark et al., 2005). These are:

- Minimum academic qualification: Passes at general proficiency level I, II or III in at least five subjects, including English language, mathematics and one science or technical subject
- Additional academic qualifications: Advanced-level undergraduate degree (non-education degree)
- Character reference
- Psychological/personality profiles and/or medical report
- Successful performance on written test of verbal, mathematical and reasoning ability
- Successful interview

RECOMMENDATION 1.2 REVIEW SALARIES AND BENEFITS TO ALIGN THEM MORE CLOSELY WITH HIGH-PRESTIGE PROFESSIONS

The actual value that is attached to teaching is gauged by the features of the compensation benefits and conditions of work for teachers and administrators. Research has shown that merely increasing salaries does not make teaching more

attractive. In addition to adequate salaries, highly successful education systems support an environment in which teachers work as professionals. Their schools are organized in accordance with professional management principles, rather than prescriptive and highly bureaucratic administrative management systems. Adequate salaries, social status, professional autonomy, high-quality professional education and professional responsibility provide the means for maintaining a professional ethos.

A review of salaries presents the opportunity to comprehensively assess the system for inefficiencies and wastage. Consideration of alternative salary and compensation structures will also be facilitated, as this may become necessary for the implementation of policy measures that address professional issues. For example, if the criteria for professional excellence are well defined and transparent, so that practitioners at every stage are aware of what is expected, those teachers who meet these criteria can be rewarded with one-off salary bonuses or timely salary increases, or some other in-kind reward such as an in-term sabbatical of reasonable length. Such a measure can serve to motivate performance excellence and at the same time provide a flexible management device for encouraging and rewarding professional responsibility. Retooling of education officers, school leaders, principals, vice principals and senior teachers with the knowledge and skills to shift from a bureaucratic model of management to a professional model will be required.

RECOMMENDATION 1.3 RECONSIDER THE SUBSIDIZING OF INITIAL TRAINING

The current policy of subsidizing initial training, while perceived to be an incentive, may in effect be contributing to the high attrition rate and the lack of commitment to teaching as a career. Also, it may be contributing to wastage, since the tendency is to use the qualification to gain entry to other professions. Personal financial investment in one's training raises its value. While it is the practice in many countries to underwrite the cost of initial professional education, it is usually a drain on the public purse. In systems where initial training is post-recruitment (as in SKN), teachers in training either receive allowances equivalent to their salaries or a percentage of it. Temporary teachers are hired to replace them, since the training is full-time. It may be more cost-effective to have people bear the cost of their training, while facilitating accessibility through testing and loan arrangements for those who cannot afford the fees.

This measure will become more significant with the implementation of the pre-service programme. The programme duration will increase from two to four years, whether the student pursues a concurrent B.Ed. Programme or a consecutive B.A/B. Sc. in Education. Under the current policy of subsidized training, the cost to the

government is likely to increase, even though there would be no need for temporary teachers.

RECOMMENDATION 1.4 ESTABLISH A CAREER-GUIDANCE PROGRAMME IN SECONDARY SCHOOLS AND A PRE-TEACHING TRACK IDENTIFIED FROM THE CXC CAPE OFFERINGS AT SIXTH-FORM LEVEL THAT INCLUDES A PRACTICAL COMPONENT OF EXPERIENCE IN SCHOOLS

This would be a proactive measure aimed at influencing career planning and exposing those likely to pursue higher education to teaching as a career through focused career-guidance activities. This will help to demystify what teaching entails, thereby enabling individuals to make informed decisions when choosing a career. It will also provide a conduit to the pre-service programme, with credits being awarded towards the degree. The offer of incentives such as scholarships and bursaries to high achievers, especially in understaffed subjects like the sciences and mathematics, will make the programme more appealing.

This measure emphasizes teaching as a worthwhile and rewarding career, while also having the potential to minimize the problems of teacher supply. Over time, there should be a steady pool of prospective teachers to select for initial training, thus making the exercise of selection more focused on quality.

RECOMMENDATION 1.5 PROMOTE AND SUPPORT CONTINUOUS PROFESSIONAL DEVELOPMENT ALIGNED WITH ADVANCEMENT THROUGH CAREER STAGES

One of the features of teaching that makes it a less attractive career is the lack of upward mobility options. A system of in-service support for continuing professional education of teachers and administrators is required for maintaining quality standards. When linked to career stages, upward mobility via promotion would become possible.

This measure has the potential to increase the attractiveness of teaching as a career to people who would otherwise be deterred by the stagnation of classroom teaching or school administration. The possibility of moving up without moving out of the classroom would appeal to those who leave teaching for this reason, and this measure can therefore also reduce the problems associated with high turnover of teachers, as well as enhance the professional image of teaching.

Policy Issue 2: Teacher recruitment practices

Efficient recruitment of teachers requires established criteria and procedures to guide the process. Selection and recruitment are important practices in the management of

teacher quality. The CBR highlighted the informal and incoherent process associated with the recruitment of teachers in SKN. Stakeholders were concerned about the lack of transparency in the process and the frequent disparities between the people recommended by the interviewing panel and those subsequently appointed to positions in the teaching service. Concern was raised in the stakeholder meetings about the gender imbalance in the teaching service, which was also flagged as a policy issue in the CBR. There was also concern expressed about the shortage of secondary teachers in science, mathematics, English and geography.

Evidence

There are many indications that teacher recruitment does not operate in an efficient way, leading to a number of issues. To begin with, both in Saint Kitts and Nevis, men are underrepresented in teaching, particularly at the primary level (UNESCO, 2014b; Vassell, 2014). On [a]verage, approximately 20% of teachers are men: 11% of primary teachers and 36% of secondary teachers (World Bank and OECS, 2011, p. 17; UNESCO, 2014b). This imbalance was reflected in the meeting with a group of student teachers during the course of the review, where there were 21 women and two men.

In stakeholder discussions, the issue of low teacher salaries was cited as the main reason for the gender disparity among teachers, despite the fact that teaching tends to be female-dominated worldwide. Some principals were critical of the inordinate delays in getting replacements for teachers. They see this as compounding the problems associated with high turnover rates, and contributing to the practice of out-of-subject teaching. Related to this is the issue of teacher shortages in specific subjects on the secondary-school curriculum. There are no specific measures to attract or recruit persons with these qualifications or to attract men to enter the teaching service. The teaching service is a unit within the public service and, as such, teachers are public servants subject to the general rules and regulations of the public service. Tenure is virtually assured until retirement.

Discussion

A comprehensive recruitment policy is one of the ways in which teaching quality is regulated. This is done by stipulating specific requirements for people wishing to enter the profession. These include selection criteria for initial training and selection requirements for entry-level teaching. Ideally, these are separate selection processes that occur at different points in time.

Recruitment practices are either centralized or decentralized, and can be career-based, position-based or a mixture of both (OECD, 2005, 2011, p. 11). Where practices are centralized, the requirements are applied nationally, making it easy to monitor and control the supply of teachers. Decentralized practices usually have requirements that relate to specific conditions at local levels. In career-based recruitment, teachers are recruited into tenured positions in the teaching service or the civil/public service, and are subject to the same terms and conditions as other categories of public servants. Position-based recruitment refers to the hiring of teachers on contract, usually as short-term measures to fill shortages in specific areas. Some countries have both types.

Teacher supply can be managed by proactive planning using data to determine the number of qualified teachers that will be needed in a given year. This is necessary where turnover rates are high and the supply pool is limited. The number of qualified teachers required to maintain quality standards in the system is not fixed; rather it will vary depending on changes in policies related to student promotion and repetition, changes in the school-age population and changes in policies related to teacher placement and retirement (Mulkeen, 2010, p. 30).

In most of the high-achieving countries, responsibility for setting the selection criteria for initial training and the entry requirements for employment as a teacher is delegated to a self-regulatory agency that is administered by members of the teaching profession – similar to practices in medicine, law and other established professions.

While there is a diversity of requirements for recruitment across education systems, the more progressive systems require a high level of academic qualification for entry into the profession via a programme of preparation (with professional qualifications required for employment as a teacher). In addition, the selection process for employment requires a successful interview and assessment of teaching competence or evaluation of a teaching portfolio. Performance on literacy and numeracy tests may also be assessed for the award of the teaching license. These are measures for quality control at the point of entry into the profession (Vegas et al., 2013, p. 13).

Singapore provides a good model for a comprehensive recruitment process. The selection of teachers is based on the candidate's performance in four components: an initial screening based on academic qualifications and interests, a literacy assessment, an interview, and continuous monitoring during initial training.

POLICY RECOMMENDATIONS

Overall, SKN has to institute a proactive recruitment process that is systematic and data driven. This general recommendation can be unfolded as follows:

RECOMMENDATION 2.1 MAKE RECRUITMENT INTO THE TEACHING SERVICE SYSTEMATIC

The Harmonized Policy Framework for Teacher Education in the Caribbean states that 'criteria for selection into the teaching service should be rigid and based on professional standards. They should also include a personality profile, a health profile and a psychological profile of the prospective practitioner' (Mark et al., 2005, p. 21). Since the recruitment process is a significant factor in teacher quality management, it should be based on specific, clearly articulated and objective criteria and multiple sources of data.

Under the current policy, the data used are mainly academic qualifications (which carry most of the weight) and the interview (which attempts to discern suitability in terms of disposition, attitudes and basic perceptions of schools, children, teaching and learning). Given the importance of language and communication in the teaching–learning dynamic, a test of English language proficiency should be added as a data source.

Implementation of the policy for pre-service initial professional education should be governed by a recruitment policy that reflects this shift. The guidelines provided in the Harmonized Policy Framework suggest: 'Performance on a written test, demonstration of teaching competence and a professional portfolio should be a requirement for the selection process for professional practice. The applicants should also be interviewed by a panel comprising teacher educators, school administrators/ school board members and representatives of parent and community groups such as Parent Teacher Associations' (Mark et al., 2005, p. 21).

The framework also lists the following criteria for selection as an entry-level teacher:

Minimum Academic Qualifications

- Undergraduate degree in education or the equivalent from an accredited programme/institution

Additional Qualifications

- Major/concentration in two content areas (secondary) or basic education curriculum (primary) or early childhood education and care (ECCE)
- Teaching portfolio

- Successful interview
- Teaching performance assessment
- Evidence of community/social service involvement with children and/or youth
- Character references/police record
- Psychological/medical profile

RECOMMENDATION 2.2 USE THE FACILITY OF THE CARIBBEAN SINGLE MARKET ECONOMY (CSME) TO RECRUIT SUITABLY QUALIFIED TEACHERS IN UNDERSTAFFED SUBJECTS AND TO MEET TEACHER SUPPLY NEEDS

Some CARICOM Member States have surpluses of university graduates in particular subjects, many of whom are either unemployed or underemployed. Advertising vacancy positions across Member States will widen the pool of prospective candidates. Bilateral arrangements or active recruitment visits to targeted Member States as a short-term measure is another option.

This measure can alleviate a particular teacher shortage problem. However, it has cost implications and can create tensions with the teachers' union if it is not carefully managed. The conditions of employment would have to be attractive enough to offset the inconvenience of relocation. This means that there may have to be different compensation packages for those recruited from other countries. Free or subsidized housing is one of the usual perks, as is a relocation grant or reimbursement of the cost of travel. Other countries in the region, such as the Bahamas, have implemented this from time to time to ease critical shortages of teachers.

RECOMMENDATION 2.3 TARGET RECRUITMENT AT MEN (PARTICULARLY AT THE PRIMARY LEVEL) AS WELL AS TEACHERS OF SCIENCE, MATHEMATICS AND OTHER SHORTAGE SUBJECTS

With respect to the problem of attracting men to teaching, the unattractiveness of teaching may be partly attributable to comparatively low salaries. While there are no hard empirical data on the situation in SKN, this explanation is borne out by empirical evidence from other countries with a similar problem. As men are usually the primary income earners for their families, if salaries are below the level of a living wage and there are no incentives, there is no motivation for men to seek employment as teachers (even though they may have the desire to teach).

There are benefits to be derived from targeted recruitment of men, in that it will redress the gender imbalance that is currently a concern expressed by stakeholders. However, as with the recruitment of teachers from other countries, this strategy

should be managed carefully so as to avoid perceptions of discrimination/preferential treatment and objections from the union.

To address the shortage of science and mathematics teachers, the policy recommendation is to consider opening access to teaching for people wishing to change careers. This will require specific modification of selection criteria to enable suitable candidates from other fields to enter the teaching profession.

Policy Issue 3: Deployment and utilization of teachers

The placement of teachers in schools is directly connected to the policies and procedures of how teachers are distributed in the system. The CBR highlights the lack of monitoring for teachers' distribution and utilization in schools, and stakeholders also shared their concerns in this regard. Principals in particular expressed the need for more mindful placement practices, especially when significant numbers of new teachers are assigned at the same time. There is also the issue of heavy workloads for teachers in certain subjects and positions at the secondary level. Efficient deployment and utilization of teachers contributes to the maintenance of quality.

Evidence

Workload issues were raised by heads of department, principals, deputy principals and education officers, as well as teachers of certain subjects. Heads of department and deputy principals are not considered to be critical positions and are therefore not remunerated as they should be. People in these positions have full teaching loads, in addition to bureaucratic responsibilities. They feel challenged and find it impossible to excel at the required bureaucratic tasks. Principals feel challenged by not having time to attend to teacher quality matters and by their own lack of expertise in providing support for teachers. Teachers of science, geography, history and mathematics have heavy workloads due to persistent teacher shortages in these areas. There is a high turnover of science and mathematics teachers generally.

Sixth-form students in Nevis were concerned that some of their teachers were not specialists in the subjects they were teaching. Because the school is annexed to Charlestown Secondary, teachers are not substantively assigned to it, as staff are shared. Teachers feel stretched by having to meet full workload requirements in the lower school. They are also affected by teacher shortages in some subject areas.

Based on visits and discussions with school personnel, the utilization of teachers in some primary and secondary schools seems not be the most efficient.

Discussion

The imperative for placement policy is the efficient use of teachers' knowledge and skills to ensure that all schools have equitable access to qualified and competent teachers. Teacher deployment may be either planned or market-based. Planned deployment of teachers is centrally controlled and has the advantage of ensuring an equitable distribution of quality teachers throughout the system. This method is highly dependent on data from schools, without which it can become inefficient. Local and individual schools' needs may not be met in a timely manner. In some systems, prospective teachers can decline an offer of placement without prejudice to their application, while in others there is no such option. Market-based deployment is decentralized. In this system, local jurisdictions have the authority to hire and deploy teachers, based on the specific needs of the schools and communities. Schools may even be given the responsibility for advertising and filling their vacancies. Prospective teachers have the opportunity to choose where they will teach. While this method ensures that local needs are met, it can result in inequalities in the system.

Efficient placement practices ensure that teachers' skills can be utilized where they are most needed. The practice of assigning teachers to teach subjects for which they have not been certified (out-of-field teaching) can be expedient but may have a negative impact on teacher quality (Ingersoll, 2003). Teachers' workloads and school organization are the primary factors related to teacher utilization. Workload affects teaching quality, since less time is available for preparation and professional development if teachers spend most of their work time delivering instruction. In countries where teacher quality is high, a teacher's working time includes time spent on non-teaching activities (including preparing lessons, marking assignments, meeting with students and parents and working with colleagues). In some cases, teachers may spend less than half of their working time on teaching (UNESCO, 2015).

As systems evolve, teachers are being required to assume more responsibility for bureaucratic or managerial tasks, as well as participating in school improvement activities. If there is a disparity between these additional tasks and the time teachers are expected to work, their motivation and performance may be unduly affected. This may also occur if teachers are assigned tasks for which they have not been adequately trained. Efficient utilization of teachers requires there to be a clear delineation of tasks and expectations, an assessment of the time and skills required and an understanding on the part of teachers of the tasks they are expected to carry out (Vegas et al., 2013, p. 16).

Underutilization of teachers is also inefficient from the perspective of economic cost. This can occur at the primary level in schools with low student populations and

relatively small classes. It can also occur at the secondary level in subjects with low student enrolment. Small classes incur greater costs per student.

There are many models of school organization and teacher deployment that address the challenges of efficient utilization of teachers. For the issue of underutilization, models used in other countries include multigrade teaching and subject-specialist teachers at the primary level for schools with low student populations. At the secondary level, the range of optional subjects is regulated, so as to have viable class sizes. To address the issue of excessive teaching workloads, some overcrowded schools operate on a double-shift system, where teachers are either assigned to shifts (primary) or assigned by subject across shifts (secondary) (UNESCO, 2015).

POLICY RECOMMENDATIONS

SKN has to establish a proactive system of planned deployment and procedures for more efficient utilization of teachers. To develop such a comprehensive system the following recommendations may be of assistance:

RECOMMENDATION 3.1 USE A CENTRALIZED OR PLANNED SYSTEM OF DEPLOYMENT WHILE GIVING SCHOOLS GREATER AUTONOMY TO ADDRESS SPECIFIC NEEDS BY ALLOWING PRINCIPALS TO SELECT FROM A POOL OF PRE-SCREENED PROSPECTIVE TEACHERS

Given the number of schools and the size of the student population, the teacher–pupil ratio should be maintained. Since the system is not extensive, centralized planning can be easily managed, provided there is a steady stream of data from the schools for its execution. There is not much differentiation among schools in the various areas, which facilitates an equal distribution of teachers. The involvement of principals in the process will ensure that the needs of individual schools are met in a timely and responsive manner. The degree of flexibility to be given to teachers with regard to placement options would have to be determined and would depend on prevailing circumstances. Some systems are tightly controlled and inflexible, and teachers have to accept where they are placed. Others give the teacher the option to accept or refuse the placement, but place limits on the number of refusals a teacher is allowed.

Systematic planning allows for proactive measures that would reduce the time taken to fill vacancies and would also eliminate the need to assign staff to teach subjects outside their particular discipline.

RECOMMENDATION 3.2 DEVELOP A CLEARLY ARTICULATED WORKLOAD POLICY

A clearly articulated workload policy is essential to the effective utilization of teachers. Ideally, a teacher's workload is the sum total of the time spent in actual instruction, preparing for instruction, marking assignments, meeting with parents and students and working with colleagues. A workload policy will help to ensure equity with respect to professional tasks in which teachers are expected to engage and to balance the teacher's work time appropriately between instruction and professional activities outside the classroom. A workload policy will facilitate the management process by allowing for the redistribution of work to those teachers who have less than the stipulated minimum load.

Scotland, for example, has introduced a 35-hour work week for all of its teachers, with a stipulation of maximum class contact time of 22.5 hours, and a minimum of one-third of contact time for preparation and marking of assignments. The remaining time is to be spent on activities that are negotiated and approved by school administration. These can include professional development activities, parent meetings, preparation of reports and curriculum development, among others. This model is recommended for consideration by SKN. While it seems to be proposing a longer day (7 hours instead of the average 5.5 hours), it allows for the implementation of initiatives to address some of the quality issues and professional concerns. The challenge will be to present the model to teachers in such a way that they understand and appreciate the benefits they can derive from it.

RECOMMENDATION 3.3 LIMIT THE NUMBER OF OPTIONAL SUBJECTS FOR SECONDARY-LEVEL STUDENTS, ESPECIALLY IN SCHOOLS WITH SMALL STUDENT POPULATIONS

This will ensure minimum class sizes in optional subjects. In this way, costs will be minimized and teacher utilization will be more efficient.

Another recommendation is to consider instituting a policy on subject specialization. At the secondary level, utilization of teachers in schools with small student populations is more efficient if teachers have been trained to teach two subjects. At the primary level, more efficient utilization can be achieved by having subject specialists or by assigning teachers to teach different groups of subjects. These organizational arrangements facilitate the enhancement of teaching quality, as teachers will be able to focus on improving their competence in one or a few subjects.

Policy Issue 4: Teacher retention and attrition

A high turnover of teachers was cited by the stakeholders as a contributing factor to some of the challenges associated with staffing in schools. Teaching tends to be used as a stepping-stone to other careers, which creates challenges for teacher demand and supply that result in the practice of hiring unqualified people to fill vacancies. High turnover of teachers introduces an element of instability into the system and has implications for the experience levels and maturity of the teaching force. There are also cost considerations related to wastage when trained teachers leave the system. Overall, teacher quality is affected by high attrition.

Evidence

Teachers and school administrators cited a high level of frustration among school personnel, which they attributed to several factors: lack of resources for teaching, lack of support from administration, lack of respect from parents and the public, and lack of student discipline. They claimed that job satisfaction and morale are low. Department heads in particular feel that the demands on them are too high, since they carry full teaching loads and are expected to mentor and manage the teachers in their departments, without compensation for the additional responsibilities.

It is significant to note that the majority of student teachers at the CFBC meeting indicated that they did not intend to remain in teaching until retirement, confirming the observations that teaching was seen as a stepping-stone occupation. The teacher educators were also concerned that teachers, especially the new ones, are discouraged by the lack of support in the schools, thus echoing the views expressed by principals and teachers. These observations underscore the need for deliberate strategies to address the issue of retention.

Discussion

Maintaining the teacher stock at optimum levels is important for system stability, efficiency and quality. Proactive management of teacher supply requires monitoring teacher flows, as well as employing strategies and practices that encourage teachers to enter and remain in the profession. Equally important is the need to track and understand the reasons why teachers leave the system. School staffing problems result from teachers leaving for reasons other than retirement. Poor working conditions, lack of support from administration, inadequate resources and student discipline are some of the factors that affect the decision to leave (Cooper and Alvarado, 2005). High attrition rates negatively impact student learning and contribute to wastage of the financial resources invested in training.

Teacher supply is stable when the number of teachers leaving the system is much lower than the average time in service of each teacher. Resignation rates are likely to be strongly linked to the alternative opportunities available to teachers in the labour market or to opportunities for further education (Mulkeen, 2010, p. 34).

Teachers are motivated to stay in teaching when morale is high. Low salaries, lack of teaching and learning materials, inadequate training and poor working and living conditions are among the principal factors that affect teacher morale and motivation (Bennell and Akyeampong, 2007; VSO, 2007, 2008). In addition, perceptions of teaching as a low-status occupation are sustained by the low entry-qualification requirements, mediocre salaries, poor working conditions, lack of teachers' autonomy and involvement in decision-making, and lack of opportunities for promotion. These factors contribute to the low level of commitment to teaching, which in turn affects retention and can destabilize the system, regardless of the state of the economy. In times of economic upturns, the lure of better paying jobs is at its strongest. When the economy is in a downturn, migration to other countries becomes a feasible alternative.

POLICY RECOMMENDATIONS

Effective management of the teacher stock requires procedures for forecasting and regulating the flow of teachers through the system (see Appendix 3). This will entail proactive planning using systematic collection and analysis of data. Information required includes projections of student enrolments based on demographic data, a policy on teacher–pupil ratios, forecasts of the number of new teachers to graduate from training programmes, and monitoring of the number of persons who do not accept teaching job offers. While it is inevitable that people will leave the teaching service for a variety of reasons, effective management requires the collection of relevant data to determine which teachers are leaving and why. For example, Organisation for Economic Co-operation and Development (OECD) research data indicate that attrition rates in member countries are highest among teachers in the early stages of their careers. In other systems, there is a high attrition rate among more experienced teachers who leave before reaching retirement age. In some systems, the attrition rate is higher among secondary-level teachers, while in others it is higher for primary-level teachers. Each of these situations requires a different strategy for addressing the challenge of high attrition.

Maintaining the teacher stock at optimum levels facilitates initiatives aimed at improving teaching quality and reduces the wastage that occurs with high attrition. SKN has to employ deliberate strategies to manage the teacher stock and stem the outflow of qualified teachers. There are several initiatives that can be implemented to target retention, especially among teachers who have received initial professional training:

RECOMMENDATION 4.1 ESTABLISH A MORE ROBUST SYSTEM OF CONTINUING PROFESSIONAL DEVELOPMENT (CPD) AND SUPPORT FOR TEACHERS

Implementation of the pre-service programme should be supplemented by an extended internship or induction programme for new teachers. The purpose of a CPD programme is to help teachers to improve and sustain their teaching competence, boost qualitative and quantitative changes in student achievement, and maintain a reasonable level of job satisfaction. The current practice is ineffective and is contributing to the expressed feelings of frustration and low morale among teachers and administrators.

RECOMMENDATION 4.2 IMPLEMENT THE PROPOSAL TO ESTABLISH A CAREER LADDER FOR UPWARD MOBILITY BY CREATING OPPORTUNITIES FOR TEACHER LEADERS TO FUNCTION AS PEER COACHES AND MENTORS TO NEW TEACHERS AND TEACHERS IN TRAINING

This measure will remove the flat structure associated with classroom teaching and potentially provide incentive and motivation for teachers to remain in the teaching service. This initiative will be even more powerful if mentorship opportunities are presented as an avenue for promotion and come with additional training and compensation.

RECOMMENDATION 4.3 CONSIDER EXPANDING THE NOTION OF THE TEACHING SERVICE TO INCLUDE THE RANGE OF EXPERTISE NEEDED TO SUPPORT CLASSROOM TEACHERS

The government can provide opportunities for obtaining targeted specialist training to meet the needs of the MOE by offering scholarships for further education. Curriculum development, literacy, leadership, assessment and research are some of the areas requiring specialist qualifications. Recipients of these scholarships should be contracted to work in the MOE for a specified number of years after completion of study. This will also diversify the possibilities open to teachers within the teaching service.

RECOMMENDATION 4.4 EXPAND THE HUMAN-RESOURCE CAPACITY OF THE MINISTRY OF EDUCATION

This need is implicit in the complaints about work demands of education officers and the need for more research activity in the MOE. Consideration should be given to establishing an M&E section, either within the Education Planning Division or as a separate department, which would expand the personnel pool and consolidate all of the research, monitoring and evaluation tasks in the MOE's purview. Consideration should also be given to increasing the number of education officers in order to

redistribute workloads, and to designate separate officers for purely administrative functions and for providing professional support through clinical supervision.

RECOMMENDATION 4.5 ENSURE THAT SCHOOLS HAVE THE RESOURCES REQUIRED TO SUPPORT QUALITY TEACHING

Study in the sciences, agriculture and the technical subjects requires steady and timely supplies of consumable materials, critical equipment to support teaching and learning, and a regimen of continuous maintenance to ensure usability. Inefficiency in this regard leads to teacher frustration and poor-quality teaching.

Policy Issue 5: Initial training procedures and programme

The CBR identified the following two issues: insufficient monitoring and evaluation of teacher training, and the need to institutionalize pre-service training. Teachers in SKN receive initial training in their first year of employment in the teaching service, making it essentially an in-service component. There is a two-week orientation exercise, referred to as pre-service, for people selected for employment prior to taking up positions. However, principals expressed concern that this does not usually take place for people hired during the course of the school year, which places additional strain on the school administration.

Evidence

The MOE White Paper for 2009–2019 has stated the following medium-term goals related to initial training: the institutionalization of pre-service teacher training, recruitment of new teachers from people who have successfully completed an initial training programme from an accredited institution, and the requirement that all teachers in the system have at least a Certificate in Teacher Education. The White Paper indicated that from 2012 forward, the minimum qualification for entry-level teachers was expected to be a credential in initial teacher education, and by 2014, all in-service teachers were to have at least a Certificate in Teacher Education (MOE, 2009, pp. 11-12).

Data from 3 school years (2011 to 2014) show a steady total of 78% of primary teachers with initial training (UNESCO, 2014b). For secondary teachers in the same period, however, there was a decline from 53% in 2011 and 2012 to 46% in 2013. This trend confirms the concerns of secondary-level principals and teachers over the shortage of teachers. While the data are not disaggregated by subject, the claim that the shortages are in science, mathematics, English, history and geography is likely to be upheld. The largest number of untrained teachers is in the early childhood sector.

Resource teachers are assigned to clusters of centres, where they monitor programme delivery and provide in-service training.

The Teacher Education Division of the CFBC has responsibility for the initial training of teachers. Meetings with the teacher educators and students confirmed the situation regarding unqualified and untrained teachers in the system. Among the group of 24 students, only one had not taught before (with the number of years teaching ranging from 1 to 10).

The programme at the College is very traditional in structure, and is delivered over two years. The Associate Degree in Education (ADE) programme, which is heavily grounded in theory and pedagogical practice, consists of 22 courses for 66 credits hours and is delivered over four semesters and one summer session. These are divided into 6 credits in General Education, 9 credits in Education Foundations, 42 credits in Curriculum and Instruction and 9 elective credits. The fourth semester consists of a Teaching Practicum of ten consecutive weeks (CFBC, 2015).

The programme is UWI-accredited and awards a Certificate in Teaching, a Diploma in Education and an Associate Degree in Primary Education, Secondary Education or Secondary Education TVET. The Associate Degree programme in Early Childhood Development is a recent addition. Students who are nationals of SKN pay no tuition fees, and teachers who are already in service receive part of their salary while in the programme (UNESCO, 2014b, p. 34). This provides some degree of motivation and incentive to become qualified.

Students in the Early Childhood Development programme had some concerns related to the ECD curriculum approach in the college's programme being different from the programme followed in ECD centres. This anomaly can be addressed through collaboration between the Teacher Education Division and the Curriculum Division Unit of the MOE to align the programme with the teaching and learning practices in schools (UNESCO, 2014b, p. 34).

In addition to this college-based programme, there is the mandatory 'pre-service' orientation programme coordinated by the education officers at the MOE. This is a recent practice in Saint Kitts but has been the norm in Nevis for some time. The programme includes a two-week session prior to taking up classroom duties, and a one-year probation during which the new teachers are mentored. These teachers may be qualified (fulfilling the academic qualifications requirement) but untrained, or they may be unqualified and untrained. They usually have the teaching load of regular teachers.

Discussion

The best policy approaches for effective teacher development practices are based on a view of teacher development as a continuum along the critical stages of the teacher's career. Teacher development starts with selection and an institutionalized pre-service programme of teacher preparation, and continues into an induction/internship programme and subsequent in-service CPD activities. Pre-service teacher education or initial teacher professional development consists of programmes and activities that are geared to select individuals and prepare them to meet entry-level requirements for teaching at the ECCE, primary and secondary levels.

Initial training programmes develop content-area knowledge, pedagogical skills and professional attitudes, and vary in structure. The concurrent model of preparation involves the simultaneous development of these competencies in a coordinated programme of teacher preparation. In the consecutive model, participants first complete a programme of study leading to a tertiary-level degree in a specific discipline, and then pursue a programme of professional studies. Alternative models target specific groups and are usually short and highly specific with respect to the qualifications for entry into teaching.

In high-performing education systems, there is a clear distinction between recruitment into the profession and recruitment into professional practice. There are strict multilayered procedures for selecting people for initial training. Whereas these systems have a high refusal rate (with Singapore selecting an average of 1 in 6 applicants), countries with teacher supply challenges tend to limit selection criteria to academic qualifications.

Pre-service programmes of teacher preparation target individuals who wish to become teachers and engage them in activities that develop entry-level competencies before they are recruited into service. In high-performing systems, teacher supply is generally regulated by the labour market. Autonomous institutions partner with the education system to develop and deliver programmes of teacher preparation that certify persons for entry-level teaching. The cost of training is usually the responsibility of the student, as it is with any other career profession. This ensures that there is usually a ready supply pool of qualified people from which new teachers can be recruited, thereby generally reducing the likelihood of a teacher-supply problem. The challenges of teacher supply usually rule out the option of regulation by labour market forces, especially in low-income countries where the State assumes full responsibility for initial training and certification (thus absorbing the associated economic costs).

The more successful programmes of initial teacher education are embedded in the schools and classrooms, and focus on providing real-world experiences throughout the duration of the programme. These programmes shift from a skills-based focus on teacher training to one of teacher learning (where the emphasis is on developing the prospective teacher's understanding through integrated field experiences, attention to their original beliefs and the formation of their professional identities) (Feiman-Nemser, 2001).

The duration of initial training varies widely across countries. High-performing countries tend to have programmes of longer duration, as initial training continues in an induction/internship programme after placement in a school. The period of induction varies, but the more successful programmes are two to three years. In Singapore, the induction period is three years, during which new teachers are mentored and attend mandatory professional development sessions. They have reduced workloads of approximately 75% that of regular teachers.

The reality is that induction, whether planned or not, is inevitable. Unplanned induction, or the 'sink or swim' model, operates when new teachers are left on their own to find their way through the maze of experiences that they encounter in the daily business of the classroom and school. This can lead to feelings of frustration, helplessness and demotivation – especially in contexts where there is limited teacher interaction related to teaching and learning. It also perpetuates negative practices, since new teachers tend to follow the norms of the schools in which they are placed. Effective induction programmes are structured around a vision of good teaching and standards of performance for student learning that build on the pre-service experience, and are not merely focused on facilitating the transition into the school environment (Feiman-Nemser, 2001, p. 1031).

There are many benefits that can accrue from a well-structured induction programme. It extends the period of initial training and provides the support that new teachers need to build their confidence and strengthen their teaching competence. This may have a direct impact on attrition rates. Reduced teaching loads will ease the classroom demands on the novice teacher, to which the current practice is insensitive. Induction programmes also provide the opportunity for diversity within the profession by creating a space for emerging teacher leaders/mentors/coaches and teacher educators. The professional culture in schools can be enhanced through an induction programme. It also creates the possibility of adding a lower rung on the remuneration ladder, as entry-level teachers can be justifiably compensated with lower salaries in exchange for extended training.

The institutions that offer teacher-education programmes, whether in-service or pre-service, should be regulated by a framework of academic standards that provide benchmarks for efficient and effective teacher development against which their programmes can be monitored and evaluated. This is a measure of quality assurance.

POLICY RECOMMENDATIONS

RECOMMENDATION 5.1 IMPLEMENT A PRE-SERVICE PROGRAMME FOR INITIAL PROFESSIONAL EDUCATION

Teaching quality begins with the learning experiences provided in the programme of initial teacher training. A pre-service programme has the advantage of sowing the seeds of quality and initiating the teacher-development process by arming the prospective teacher with the competencies required for survival as an entry-level teacher. It reduces the risks involved in placing people without these competencies in classrooms, and certifies that they are 'fit to teach'.

While the CFBC would be responsible for the development and delivery of the pre-service programme, the MOE must maintain oversight through monitoring and evaluation. The field-experience component of the programme brings the prospective teacher into direct contact with students and teachers in classrooms and schools. This is the most critical aspect of teacher training, and steps need to be taken to ensure that students' field experiences are acquired in schools with healthy climates for professional learning and teachers who are good role models. The practicum in particular can compromise the integrity of the teacher-training process because it requires student teachers to spend extended periods in schools working closely with cooperating teachers. For this reason, it is necessary to ensure that schools intended for placement of student teachers satisfy established criteria. Similarly, cooperating teachers must satisfy the criteria for selection and participate in a training programme. This requires collaboration between the MOE and the CFBC, as well as the cooperation of school administrators and teachers.

RECOMMENDATION 5.2 INSTITUTE A POLICY OF INTERNSHIP FOR GRADUATES OF THE PRE-SERVICE PROGRAMME

Consideration should be given to requiring entry-level teachers to undergo a two-year internship during which they are required to participate in a structured induction/mentoring programme. Participation in the programme should require them to have reduced workloads in order to facilitate attendance to other activities such as seminars and workshops that should form part of the induction programme.

An example of the early career mentoring system practiced in Scotland is detailed in Appendix 1.

The current practice for new teachers is their de facto programme of initial training, which is in-service because they are already deployed in the classroom. As a short-term measure until the policy requirement for pre-service initial training can be fully implemented, it is recommended that policies be reviewed to accommodate the practice of reduced workloads for new teachers with increased mentoring activity over a two- or three-year period. This measure will in part address the need for more support and attention to quality.

Policy Issue 6: Continuing professional development

The CBR cites the absence of a framework for CPD as an issue. This stage of teacher development is significant for the maintenance of standards for quality assurance and accountability. Professionalizing teaching requires that the quality of practitioners is ensured at each stage of their teaching careers. Quality is sustained by providing teachers with opportunities and access to professional development activities throughout their teaching careers. The upgrading of unqualified and untrained teachers in-service is, in fact, initial professional training in the context of SKN.

Evidence

The meetings with the MOE officers provided insights into how in-service teacher development is managed. The portfolio of responsibilities of education officers includes supervising teachers. They reported that in schools they perform bureaucratic tasks and provide classroom support for teachers through clinical supervision sessions. However, they also cited an inability to follow up on the clinical supervision visits because of the constraints of time and their heavy workloads.

The Curriculum Development Unit also provides support for teacher development by organizing workshops to address the gaps in teachers' knowledge and skills, particularly in the teaching of mathematics, science, social studies, technical subjects and language.

Principals and heads of departments are also required to provide support for teacher development, but they too are finding it difficult to be effective because of the other demands on their time. The principals also reported that they lacked the expertise to provide support for teachers. In-service teacher development activities seem to be focused on the upgrading of unqualified and untrained teachers. The CBR observes: 'While clinical supervision happens in all public and assisted private primary-

secondary schools, generally speaking, too few teachers are regularly exposed to the process. By and large, clinical supervision efforts have concentrated on monitoring untrained teachers, leaving a significant number of teachers in school under-supported' (UNESCO, 2014b, p. 57). Principals in particular claimed that the lack of training in the requisite skills was hindering their functioning as instructional leaders.

There is no perceptible evidence of an organized programme or institutional provision of opportunities for teachers' professional development beyond the initial stage. Teachers pursue further education mainly to upgrade academic qualifications and usually at their own cost. This practice, when salary policies and working conditions are considered, is a contributing factor to the high rate of teacher attrition.

Discussion

On the teacher development continuum, the in-service phase of teacher development continues from induction to retirement. Structured programmes of in-service teacher development sustain the teacher professionally by providing opportunities for professional growth as teachers gain experience and mature in professional practice. Professional growth is manifested by qualitative changes in teaching and in teachers. These changes are the result of transformation of knowledge about teaching acquired through collaborative experiences and self-study, resulting in new levels of understanding and higher levels of teaching competence.

In the less successful systems, this phase of teacher development is unsystematic and usually involves ad hoc and sporadic activities organized by the school as staff-development activities, or centrally by the MOE or its agencies. However, in high-performing countries it is well-organized and structurally embedded in the performance expectations of teachers. Some countries include time spent on professional development as part of the teacher's workload. In Sweden, for example, a teacher is expected to engage in 104 hours (15 days) of professional development per year, which is calculated as 6% of the workload (OECD, 2005, pp. 127–131).

In effective CPD, teachers engage in collaborative and reflective activities such as school-focused research and development projects, sharing and critique of teaching portfolios, peer–coaching and lesson-study. A school-based system of teaching-performance management that incorporates these types of activities provides a more coherent and purposeful approach to in-service teacher development by facilitating the integration and alignment of the teachers' individual professional growth with their teaching responsibilities and the school's development goals (OECD, 2005, pp. 127-131). This is consistent with the approach of seeing teacher development

as teacher learning, rather than teacher training (and an approach that is more likely to benefit schools and the system). The loss of teaching time is often cited as a disincentive when professional development activities are organized during regular school hours, thereby restricting the frequency of the traditional staff/professional development activities. This calls the effectiveness of these activities into question.

Clinical supervision is seen to be the vehicle for CPD for in-service teachers in SKN (UNESCO, 2014b, pp. 71-72). It is a methodological protocol that was first developed to facilitate a strategic approach to working with student teachers on their practicum in schools (e.g. Goldhammer, 1969). Peer coaches and mentors use an adaptation of the original model with in-service teachers (Hunter, 1984). In clinical supervision, the teacher and the 'supervisor' engage in reflective dialogue in repeated cycles of planning, observation and feedback that are focused on improving instructional skills. The primary purpose is to enhance teacher competence and teachers' professional development.

Two features of the clinical supervision model seem to be hindering its effectiveness in the context of SKN. The highly interactive individualized nature of the process (and the demands on supervisors with respect to timely follow-up) hamper any full realization of the intended outcomes pertaining to teachers' professional growth. Teachers need 'growing room', which means the sufficient and necessary time to reach performance targets. This will vary markedly from teacher to teacher and from school to school, which has implications for mandatory annual performance evaluations.

A framework for sustainable CPD should comprise a range of programme activities that are centred on promoting teacher learning to foster professional growth and development and enhance teaching effectiveness. Such activities should target the individual teacher and include a wide range of activities, including school-based and MOE-organized activities, activities that lead to increased qualifications, approved activities that target specific initiatives organized by other agencies, or approved online professional development courses sought out by individual teachers.

The Framework of Teaching Performance Standards for CARICOM countries has set out policy guidelines for a support system for the continuing professional development of teachers (Mark, 2013, p. 26). Programmes for CPD should be:

- Intensive and sustainable
- Focused on student learning and the enhancement of teaching competence
- Aligned with the school's mission and development priorities
- Strengthening the working relationships among teachers

The In-Service Education and Training (INSET) initiative for primary-level teachers in Zambia is a successful model of a well-structured CPD programme (Mulkeen, 2010, p. 99). CPD is managed with a credit system, which motivates teachers to participate in CPD activities. One credit is earned for each activity attended. Credits are accumulated and are needed for promotion and study-leave considerations.

Teachers in Zambia have three levels of support. At the school level, a coordinator works with the principal to determine teachers' needs. The teachers are assigned to working groups, which meet twice weekly to discuss the challenges encountered in the course of their teaching. The school arranges professional development activities to address the problems. At the zonal level, clusters of schools are served by a zonal resource centre, which is usually a classroom in one of the schools in the cluster. At this centre, the teachers from the cluster schools meet for group activities and to access resources. Each centre is managed by a volunteer coordinator, usually a part-time teacher. At the district level, district resource centres provide a range of facilities for teachers that include a library, photocopiers, computers, internet access and training sessions (Mulkeen, 2010).

POLICY RECOMMENDATIONS

In-service teacher development is the process that sustains the teacher professionally by providing opportunities for professional growth as teachers gain experience and mature in professional practice. Professional growth is manifested by a qualitative change in teaching that results from the transformation of experiential pedagogical knowledge to new levels of understanding and higher levels of teaching competence.

RECOMMENDATION 6.1 DEVELOP AND IMPLEMENT A CONTINUING PROFESSIONAL DEVELOPMENT PROGRAMME FRAMEWORK FOR POST-INDUCTION TEACHERS

CPD is an ongoing process aimed at increasing growth and maturity in the skills and competencies required for effective teaching. This is achieved by various means, ranging from in-house collaborative activities to formal education study. The CPD programme's major objective should be teachers learning to enhance their effectiveness through professional growth and development. The programme should provide these learning experiences throughout the teaching career, and should offer a range of activities, including:

- Collaborative activities organized and managed by the school
- Activities that support the implementation of policy organized and managed by the MOE
- Activities that lead to further academic and professional qualifications

- Approved activities that target specific initiatives organized by other agencies
- Approved activities accessed by individuals, such as online courses

RECOMMENDATION 6.2: ESTABLISH A POLICY OF SCHOOL-BASED TEACHER PERFORMANCE MANAGEMENT TO SUPPORT THE PROGRAMME OF CONTINUING PROFESSIONAL DEVELOPMENT

Based on the principle of 'teachers helping teachers', school-based teacher performance management operates on the assumption that every school has a resident pool of teaching expertise that can be harnessed to enhance the performance of the staff (and by extension the performance of students). This collective expertise is a ready source of experiential knowledge and successful teaching strategies that relate to the context of the particular school. It provides the basis for collaborative activities and collegial relationships that focus on the school's mission and educational goals, while at the same time addressing teachers' professional development needs.

School-based performance management should drive the CPD programme. Each school should appoint a teacher performance management team to coordinate and manage CPD activities. Teachers should be mandated to participate in the school's collaborative activities. The principle of 'teachers helping teachers' should guide the process. The performance management process may also include teacher-to-teacher interactions and networks within and among school clusters and participation in online communities and networks.

Consideration should be given to introducing a credit system for CPD. Teachers should be required to provide evidence of participation in professional development activities. The credits could be awarded either on the basis of a stipulated number of hours or on the type of activity. They could also be required to develop yearly professional growth plans, which would be used to guide their CPD activities. In addition, schools and individuals can use online training provided by agencies such as the Commonwealth of Learning (COL), the Association for Supervision and Curriculum Development (ASCD) and the Inter-American Teacher Education Network (ITEN).

Many benefits can be derived from a school-based performance management system. These include:

- Fostering collaborative teacher learning in the context of the school
- Providing opportunities and motivation for teachers to pursue personal career paths
- Addressing performance needs at the individual, departmental and school levels

- Promoting a positive professional culture and enhancing the ethos of the school as a learning organization
- Enhancing quality

Policy Issue 7: Teacher evaluation

Evaluation of teachers' performance is an important data source for monitoring teacher quality, managing teaching performance and ensuring system accountability. The CBR mentions two points with respect to teacher performance and appraisal: inconsistency in the implementation of the practices of clinical supervision and teacher appraisal, and the unsystematic use of data to inform decision-making about teacher quality and teacher effectiveness (UNESCO, 2014b, p. 72).

Evidence

The SKN teacher appraisal system requires principals to conduct annual performance evaluations of their teachers. These appraisals are used to provide teachers with feedback on their teaching performance and to determine eligibility for established incremental increases in salary. The generic appraisal instrument used to assess teaching performance is currently under review.

At the primary and secondary levels, principals are also expected to provide instructional leadership and assist their teachers by means of clinical supervision. In the early childhood sector, the National ECD Standards are used to evaluate teachers.

The concerns expressed by stakeholders in this regard revolved around issues of time and lack of training, which they describe as contributing to their inability to do justice to the process. This no doubt contributes to the observed inconsistencies in the use of data mentioned in the CBR. While education officers reported that they do walk-throughs and classroom observations when they visit their schools, they admitted that these visits were mainly concentrated on bureaucratic rather than clinical tasks.

The 2012/13 data show that 94% of primary-school principals and 64% of secondary principals were trained teachers (UNESCO, 2014b, p. 67). In practice, principals are not required to have specific training in administration or leadership to be eligible for appointment (ibid., p. 60). This practice has implications for the effectiveness of leadership in the schools, which is left to the initiative of individual principals.

Stakeholders also noted that there is no unit in the MOE dedicated to research, and that data collection and analysis with regard to teacher performance and effectiveness

were not usually carried out. The Education Planning Division generally collects data as needed.

It is worth noting that the challenges of teacher absenteeism and other such management issues that are the norm in most systems were not a prominent feature in SKN, according to the CBR and interviews with stakeholders.

Discussion

Monitoring and maintaining standards for quality assurance is dependent on the systematic collection and analysis of relevant data, as well as the effective use of data analysis results to drive decision-making for school development initiatives and system improvement.

Performance appraisals provide the data for decision-making in teacher evaluation, which serves both formative and summative purposes. The professional growth and development needs of teachers are identified and managed through formative assessments of teaching performance. Summative evaluations of teachers' performance provide data for system accountability. Effective teacher evaluation practices manage formative and summative activities independently, even though they both fulfil the requirements for accountability and quality assurance.

In SKN, the CBR found that the defined purpose of the formative and summative performance evaluations is to 'provide a formal means of communicating feedback to the teacher regarding his/her professional strengths and/or weaknesses,' and to serve as an 'accountability tool to be used by the Principal and Ministry of Education in order to effect efficient teaching-learning outcomes within schools' (UNESCO, 2014b, p. 72).

It is worth noting the distinction between teacher appraisal and clinical supervision. Although both are concerned with teachers and teaching performance, they serve different purposes. Clinical supervision aims to enhance teachers' professional growth, while teacher appraisal focuses on evaluating the quality of teaching and teacher performance – usually for the purposes of accountability, promotion and retention.

The practice of formal annual appraisals for teachers has been cited by some researchers as one of the hindrances to meaningful professional growth (e.g. Duke, 1993). The CBR raised concerns about the challenges of inadequate human resources and the ineffective use of performance appraisal data in bureaucratic management of

the monitoring of teaching quality. These issues point to the need to reconsider the frequency and use of teacher appraisals in the management of teachers.

The CBR also refers to the weak link between appraisal and professional development in SKN (UNESCO, 2014b, p. 75). A model of teacher evaluation that integrates performance appraisal with support for teachers' professional growth (which is school-based to accommodate contextual differences and needs) will satisfy the requirements of accountability and quality assurance. The teacher-performance management practices that are employed in Cuba provide a good example of an integrated model that has been successful in sustaining quality teachers for the Cuban education system (Gasperini, 2000).

The MOE 2009 White Paper has a stated goal of establishing career paths within the teaching service in SKN, as outlined in the Harmonized Policy Framework. The CARICOM Performance Standards Framework provides a structure that is based on five critical stages of a career in classroom teaching. By means of standards-based appraisals, an individual can start off as an entry-level teacher and be promoted through the successive stages of advanced beginner, professional teacher, advanced professional teacher and master or expert teacher. Both of these frameworks offer a means of making teaching more attractive and comparable to other established professions by providing tangible avenues for promotion and career development.

It is also important to note that quality teachers and quality teaching are the products of strong leadership at the school level. In high-performing systems, strong school leadership is one of the common factors that influence quality (Chapman, 2005). This type of leadership requires a conceptual shift in the role and function of the principal – from a manager of resources to a leader of professionals, in keeping with the current views of schools as learning organizations and teachers as professionals. Preparation for principals is a prerequisite for effective management and successful schools. This preparation should focus on exposure to models and styles of successful leadership in educational settings, and should provide opportunities for developing leadership skills through practical experiences and internships. Principals should also be evaluated by means of performance appraisals in the same way and for the same reasons that apply to teachers.

POLICY RECOMMENDATIONS

RECOMMENDATION 7.1 ADOPT AN INTEGRATED TEACHER EVALUATION SYSTEM

The model of teacher evaluation that is recommended for SKN is an Integrated Teacher Evaluation system, based on the Roles and Goals Evaluation Model defined by Stronge and Tucker (2003). Using a systems approach that focuses on school context factors, this model is flexible and can be used for all practitioners. It integrates the procedures and activities that promote professional growth with those that serve the accountability purpose in a system that comprises both formative and summative components.

The formative component of performance management, as discussed in the previous section, is school-based and consists of continuous ongoing activities geared towards the development and enhancement of the competence of teachers and administrators. The focus is on professional growth and development, managed by means of a variety of collaborative, collegial and independent activities. These activities should be well-documented to provide accumulated evidence for the summative component.

The main purpose of the summative component is system accountability. The summative appraisal process is a comprehensive assessment of teaching performance. This consists of a cyclical appraisal of performance over a period of no less than three years but no more than five years. This component informs decision-making that is related to renewal of professional status, promotion and retention.

Both the formative and summative components of the Integrated Teacher Evaluation system require the collection of information about teaching performance. The information required for the formative component is informal. The information required for the summative component is comprehensive and should represent the accumulated evidence of professional activity and growth over the appraisal period, including informal teaching performance assessments. The information required for the summative appraisal process should come from a variety of sources, which include a professional teaching portfolio, reports on participation in related school activities, observations of teaching, student performance and reports from the principal and other administrators.

The Integrated Teacher Evaluation system is context-specific; it works within the peculiarities of each school. Evaluation is based on the needs of the students, teachers and the wider community. Teacher appraisals are guided by working conditions such as workload, class size, student characteristics, physical conditions, resources and opportunities for professional growth. Clearly defined duties provide the framework

for appraisals. These duties are defined by the teacher's role, which is to plan teaching, implement the instructional plan, manage the instructional environment and perform related professional tasks. Summative evaluations are based on multiple sources of evidence. An assessment rubric ensures consistency in assessing and interpreting performance evidence.

The Integrated Teacher Evaluation system facilitates professional growth enhancement. It enables the identification of teaching excellence and improved performance, and provides feedback and direction for improvement. The benefits that derive from a teacher evaluation process that integrates mechanisms for system accountability and mechanisms for professional growth are pervasive. All components of the education system are beneficiaries. The key areas that will be impacted are:

1. Professional growth and development

In order to derive full benefits from the performance management process, individuals must take charge of their professional development. The process will facilitate the development of growth plans, performance targets, self-assessment and a means of improving competence. These are the key to continuous professional growth and attainment of higher levels of competence. Professional development should positively impact the teaching and learning process, and should not be confused with personal development via career advancement.

The teacher evaluation process also makes it possible to differentiate levels of teaching expertise, thereby providing a mechanism for promotion that enhances motivation and satisfaction for those practitioners who prefer to remain as classroom teachers. It also provides a mechanism for the identification of potential mentors, cooperating teachers, peer coaches, department heads, deans and other such officials. By these means, the teacher evaluation process can facilitate career development.

2. Professional culture of schools

The development and enhancement of the professional culture of schools is directly linked to the formative component of the model. Effective pedagogical practices reside within individuals. In the school-based model of performance management, the principles of collaboration and 'teachers helping teachers' are the basis on which these practices are shared. Over time, they become the collective practical wisdom of the school and – if well-documented – can be added to the collection of effective practices for dissemination throughout the system. Teachers should be encouraged not only to seek help from their colleagues but also to share their experiential knowledge and skills. A school's professional culture is shaped by pooling experiences, sharing knowledge and promoting the development of skills derived from these experiences. This process is driven by honest dialogue, collaboration and cooperation, as the

school community engages in the collective effort to fulfil its mission and realize its vision.

3. System accountability and quality assurance

An integrated teacher evaluation process enables a strategic approach to meeting the demands for quality assurance and accountability. It has the potential to energize the education system and set the stage for a more responsive and client-friendly teaching service. This speaks directly to issues of quality and accountability. Teachers will be encouraged to stretch themselves and reach for higher levels of competence. The proposed process will encourage professional dialogue and focus on effective practice. This is the fuel that will ignite and sustain teachers professionally. Systematic teacher appraisals provide the data for monitoring the quality of teachers and their professional competence over realistic periods of time.

4. Career options

Career development is one of the benefits individuals can derive from an efficient teacher evaluation system. The process of identifying expertise and competence levels through self-assessment, reflection and appraisal has the potential to motivate and direct interest in specific areas within formal education. Careers in education can be developed along four major pathways, in keeping with an expanded view of the 'teaching service' which includes all functions that relate to the work of the schools. The four broad categories of specialist functions along which career paths are possible within the teaching service have been identified as (1) classroom practice, (2) administration and leadership, (3) teacher education, and (4) teaching support (Mark et al., 2005).

RECOMMENDATION 7.2 REVIEW THE TEACHER APPRAISAL INSTRUMENT

Also recommended is a review (and likely the redesign) of the teacher appraisal instrument to align it with the Framework of Generic Teaching Performance Standards that is outlined in the CARICOM Professional Standards document (Mark, 2013).

Policy Issue 8: Quality assurance and accountability

Although this issue is the driver across all three teacher policy domains, it is discussed here as a teacher management issue. Professionalizing teaching is an inherent goal in the revisioning of teaching and teacher education in the CARICOM region, as outlined in the Harmonized Policy Framework document. In this regard, issues of quality assurance and accountability become central to the management dimension of teacher policy. The establishment of a regional framework for teacher performance

and academic standards is part of this process of professionalizing teaching. Although the CBR and the stakeholders expressed concerns related to quality and accountability, there is no perceptible coherent structure in the education system with a dedicated function of addressing quality assurance and accountability related to teaching and teachers.

Evidence

According to the CBR and the interactions with stakeholders, there are aspects potentially related to quality assurance and accountability that fall under all three teacher policy domains. For example, in the domain of teacher supply, the orientation and induction programmes for new teachers and the upgrading programmes for unqualified and untrained teachers are practices that relate to the quality of teachers. Clinical supervision intended for all in-service teachers is a teacher development practice that relates to teacher quality. Teacher appraisal is a management practice that relates to accountability. However, there is no perceived overarching policy that links these practices as quality assurance or accountability procedures.

The MOE White Paper lists among its medium- to long-term goals the establishment of a Teacher Education Advisory Committee 'to advise the Clarence Fitzroy Bryant College on national teacher education/training needs and to make recommendations for teacher professional development courses or programmes' (MOE, 2009, p. 12). It is to be noted that this goal is limited in scope, and is silent on quality assurance functions.

Discussion

A cohesive approach to teacher management is likely to be the most effective strategy for achieving goals related to teacher quality assurance and accountability. There are many benefits to this approach. First, it can mitigate the lack of data availability resulting from the failure to systematically document and collect pertinent information as the evidence for decision-making. Second, it allows the monitoring and evaluation of key management factors that relate to accountability and standards to be strategically organized. Third, such an approach provides a structure to facilitate a focus on professional concerns rather than on the purely bureaucratic concerns that the teaching sector shares with the other sectors in the civil service.

Quality assurance and accountability are requirements that balance professional practices and policies with bureaucratic practices and policies. Quality assurance relates to the professional aspects of teachers and teaching. Accountability is concerned with the bureaucratic aspects of the teaching service. Current management practices

are rooted in the bureaucratic paradigm of the civil service. There is an absence of any meaningful professional input by the teachers in decision-making, and they lack autonomy as a professional group.

Accountability operates at three levels: the individual teacher, the school and the system. It is usually a management consideration. Effective teacher appraisal systems hold teachers and schools accountable for student-learning outcomes by targeting teachers' professional development as a means of improving student learning. When criteria for school evaluations and teacher appraisals are aligned with the development objectives of the school and the targeted education outcomes of the system, there is a clear link established between the provision of continuing professional development and teacher, school and system accountability (OECD, 2011a, p. 40).

The new vision for teaching and teacher education for the region, as outlined in the CARICOM Harmonized Policy Framework and in the Professional Standards documents, addresses the need for sustained professional input in the education system. One of the major initiatives in the move to professionalize teaching is the call by the region's teacher educators for professional oversight to regulate teaching and teacher education regionally, and for National Teaching Councils (NTCs) in each CARICOM Member State. The aim in establishing NTCs is to raise and maintain high standards in the teaching profession. As statutory administrative bodies, the NTCs would coordinate all components of the teaching profession and channel resources so that teaching remains responsive to the needs of all types of learners (CARICOM, 2010).

Teaching Councils are self-regulating bodies, in which most or all members are education professionals and teachers. The main function of the Teaching Council is to regulate the teaching profession by means of professional registration of teachers, control of standards and the enforcement of a code of professional conduct. Registration and licensing, where they exist as regulatory measures, are fee-based in most cases, meaning Councils are either totally or partially self-financing.

Some examples of a range of countries with established Teaching Councils include Australia, Ireland, Jamaica, Nigeria and the United Kingdom. While there are differences in the details that describe the functions of the Councils in various countries, they all serve the same purpose: management of the profession. Details of the scope of functions of some Councils are listed in Appendix 2. Belize's hybrid model has incorporated some of the functions (licensing, professional registration, recruitment and discipline) of the Teaching Council into the remit of the Teaching Service Commission, and has established a Board of Teacher Education 'for the

purpose of assuring the quality of teacher education' (Government of Belize, 2010, p. 145).

An NTC addresses the need for a cohesive teacher management structure in SKN, to service the policies and practices required to address issues of accountability and quality assurance related to teaching and teachers (Mark, 2013, pp. 12–14). If properly established, the NTC has the potential to benefit the teaching profession and the wider education sector. The teaching service will be brought up to par with other service professions, and the status of teaching will be brought into line with international standards and best practices. Accountability and quality assurance will be more effectively addressed. The NTC will advocate for and highlight the professional issues that influence and affect the quality of education. It can also be mandated to advise the MOE on policy matters related to professional issues. Focused attention on quality assurance, accountability and equity will enhance efficiency and effectiveness in the education sector. In summary, the NTC can be an invaluable asset to the education sector by strengthening capacity and enhancing the image of the teaching profession.

POLICY RECOMMENDATIONS

RECOMMENDATION 8.1 ESTABLISH A NATIONAL TEACHING COUNCIL TO MANAGE THE TEACHING PROFESSION TO MEET THE DEMANDS OF QUALITY ASSURANCE AND ACCOUNTABILITY

The CARICOM Framework for the Establishment of National Teaching Councils outlines the procedures for setting up the NTC (CARICOM, 2010). The NTC will have representation on the Caribbean Council for Teaching and Teacher Education, which will function as the regional body coordinating and guiding the NTCs in CARICOM Member States. Consideration should be given to revisiting the proposal for a Teacher Education Advisory Committee and revising to incorporate the functions of the NTC.

Consideration should also be given to introducing professional licensing and registration as a quality assurance measure linked to teacher appraisal. The CARICOM professional standards document explains that 'the professional license provides assurance to stakeholders, clients and the general public that those to whom it is granted are fit to practice the profession' (Mark, 2013, p. 54).

Summary

This review of teacher policies sought to identify issues in the existing framework of policies and practices. The review examined related practices in countries that are considered to be high-performing in terms of their results in international student assessments and measures of teacher quality. It also considered practices in countries with educational and socio-economic profiles similar or comparable to those of SKN. The CBR and site visit provided the baseline information.

Policy issues that relate to teachers have been discussed under the broad domains of teacher supply, teacher development and teacher management, using the SABER teacher policy goals as guides. The discussion related to the policy domain of teacher supply addressed the perceived challenges related to attracting suitably qualified persons to a career in teaching; recruiting, strategically placing and effectively utilizing teachers; and retaining teachers. The sections on the policy domain of teacher development reviewed pre-service and in-service teacher education as a continuum of teacher professional development from initial training to retirement. The discussion of the management of teachers as a policy domain revolved around issues related to teacher evaluation as part of an integrated process of formative and summative performance assessment, serving the distinct purposes of professional growth/development and accountability.

The issues of quality assurance and accountability were discussed as part of the teacher management domain. These issues are central to considerations across the three policy domains, but they are management issues from the standpoint of system accountability. Measures and/or mechanisms for ensuring and maintaining quality standards are essentially monitoring and evaluation processes, which must be built into the management framework.

The development of a framework of policies related to teachers and teaching involves considerations of a number of factors that have all been addressed in the discussion of issues identified:

- Clearly defined expectations for teachers, which include consideration of work time and tasks
- Strategies for attracting high-achievers
- Initial training experiences
- Teacher deployment and utilization
- Leadership
- Monitoring and evaluation
- Support for teachers' professional development
- Strategies for motivating teachers to remain in teaching
- 'Professionalization' of teaching

The recommendations address the key policy issues, with discussions of the implications for related strategies that should be implemented to maximize the benefits to be gained. The table below summarizes the key issues in each policy domain and the related recommendations.

Table 5 Teacher policy issues and corresponding recommendations

Policy Domain: Academic Staff (AS)			
Policy Issues		**Policy Recommendations**	
Teacher Policy Domain: Teacher Supply			
AS 1	Attracting suitably qualified people into teaching	**AS 1.1**	Raise the bar with respect to the requirements for entry into teaching.
		AS 1.2	Review salaries and benefits to align them more closely with high-prestige professions.
		AS 1.3	Reconsider the subsidizing of initial training.
		AS 1.4	Establish a career-guidance programme in secondary schools and a pre-teaching track identified from the CXC CAPE offerings at sixth-form level that includes a practical component of experience in schools.
		AS 1.5	Promote and support continuous professional development aligned with advancement through career stages.
AS 2	Teacher recruitment practices	**AS 2.1**	Make recruitment into the teaching service systematic.
		AS 2.2	Use the facility of the Caribbean Single Market Economy (CSME) to recruit suitably qualified teachers in understaffed subjects and to meet teacher supply needs.
		AS 2.3	Target recruitment at men (particularly at the primary level) as well as teachers of science, mathematics and other shortage subjects.
AS 3	Deployment and utilization of teachers	**AS 3.1**	Use a centralized or planned system of deployment while giving schools greater autonomy to address specific needs by allowing principals to select from a pool of pre-screened prospective teachers.
		AS 3.2	Develop a clearly articulated workload policy.
		AS 3.3	Limit the number of optional subjects for secondary-level students, especially in schools with small student populations.

Policy Domain: Academic Staff (AS)			
Policy Issues	**Policy Recommendations**		
AS 4	Teacher retention and attrition	**AS 4.1**	Establish a more robust system of continuing professional development and support for teachers.
		AS 4.2	Implement the proposal to establish a career ladder for upward mobility by creating opportunities for teacher leaders to function as peer coaches and mentors to new teachers and teachers in training.
		AS 4.3	Consider expanding the notion of the teaching service to include the range of expertise needed to support classroom teachers.
		AS 4.4	Expand the human-resource capacity of the Ministry of Education.
		AS 4.5	Ensure that schools have the resources required to support quality teaching.
Teacher Policy Domain: Teacher Development			
AS 5	Initial training procedures and programme	**AS 5.1**	Implement a pre-service programme for initial professional education.
		AS 5.2	Institute a policy of internship for graduates of the pre-service programme.
AS 6	Continuing professional development	**AS 6.1**	Develop and implement a Continuing Professional Development programme framework for post-induction teachers.
		AS 6.2	Establish a policy of school-based teacher performance management to support the programme of continuing professional development.
Teacher Policy Domain: Teacher Management			
AS 7	Teacher evaluation	**AS 7.1**	Adopt an Integrated Teacher Evaluation system.
		AS 7.2	Review the teacher appraisal instrument.
AS 8	Quality assurance and accountability	**AS 8.1**	Establish a National Teaching Council to manage the teaching profession to meet the demands of quality assurance and accountability.

Chapter 3
Curriculum development

Introduction

The school curriculum of SKN is the responsibility of the Curriculum Development Unit, a specialist unit within the MOE. The mandate of the CDU is 'to design, implement, and monitor the National Curriculum' (UNESCO, 2014b, p. 77).

The 'formal' or documented curriculum itself is very simple in both its structure and content. For primary schools, it consists of a set of curriculum guides (produced between 2000 and 2003) for each of the following subjects: language arts, mathematics, science and technology, and social studies.[2] For the first three years of secondary school (Forms 1-3), there is similar documentation for communication studies and mathematics. Subjects at the primary level are examined annually across the country at the end of Grades 3-6 using the National Test of Standards, and subjects in Forms 1-3 are assessed annually using the Common Examinations.

In reality, these guides are purely statements of content – in effect, content standards. They present the range of knowledge and skills to be acquired by students in an order and sequence that reflects a logic for the content (in that it is comprehensive and expressed in discrete sections), but do not offer any support for the planning of learning activities for the classroom or for the teaching and learning process. There is no advice, for example, on how the knowledge and skills content from different sections of the guides can be incorporated into teaching units about topics of interest to the students and relevant to their various stages of development.

As content standards in this narrow sense, the guides offer no advice to teachers about important matters such as pedagogical approaches that are relevant to the subject or methods for assessing student achievement and progress. It would appear that no supplementary support is offered to teachers to help them develop approaches, plan curricular units and lessons or place content into real-life situations and scenarios. While some assistance to teachers may be available through collaboration with

2 There is also a Health and Family Life Education (HFLE) Curriculum adapted from the CARICOM/UNICEF Regional HFLE Curriculum Framework. No mention of this document was made during the consultations held during the review mission. It is possible that it is given little attention because of its 'non-core'/'non-examinable' status.

colleagues or training courses, no evidence of that was mentioned during the review mission.

Only one example of a textbook was provided for reference during the mission – a primary-level language arts textbook. While this textbook did provide some ideas for teaching and classroom activities, the approaches presented in the text were not conducive to high-quality teaching and learning. The textbook consisted of a set of units, each comprising a 'comprehension' passage and questions, as well as a range of other grammar/usage and spelling activities. The comprehension activities offered no apparent context for the selection of the text itself, and the sets of questions were directed largely at simple decoding and understanding rather than analysis, interpretation and personal response. Similarly, other parts of the units seemed to provide no real context for the activities. This approach to English-language texts is reminiscent of textbooks generally supplied to schools in the 1970s and 1980s.

It is therefore largely left to the teacher to bring the curriculum to life. The teachers seem to have sole responsibility for making learning interesting and enjoyable, and for placing the knowledge and skills identified in the guides into contexts that are relevant and meaningful to students. However, teachers seem to receive little guidance about how to develop a teaching programme that will ensure a meaningful sequence of learning as well as coverage of the scope required by the guides.

In addition to the curricular areas covered by the guides, a range of activities take place in schools to ensure learning occurs in other 'non-core' areas. For example, schools attempt to schedule sport and physical education activities for all students, and rely on officers of the Ministry Youth, Sports and Culture to visit the school and implement this 'extra-curricular' programme.[3] Similar arrangements exist for creative arts and possibly other areas. However, the learning in these subjects is not supported by a curriculum document, nor is it subject to any assessment process or regime. These areas are seen at best as 'non-core' and, at worst, as unimportant and 'dispensable'.[4]

With regard to tracking students' progress, the curriculum guides contain no performance or achievement standards. There appears to be no information provided to teachers that will allow them to judge students' progress in each subject within some framework of benchmarks and expectations. This has significant implications for teachers' work in the classroom. For example, there is no evidence in the guides

3 In Nevis there are scheduled physical education classes and dedicated physical education teachers at all schools.

4 During consultations, it was often claimed that these non-core activities were dispensed with altogether if it was felt that more time was needed to prepare students for the Test of Standards in the core subjects.

of support for teachers in differentiating their approaches to cater for the range of student needs. While to some extent this differentiation is managed through a process of 'streaming' (the nature and implications of which are discussed later in this report), this does not completely abrogate teachers of their responsibility to acknowledge the various abilities that will inevitably exist within their classes. This lack of support has particular implications for students with special needs, including those with learning difficulties and those who are particularly gifted and talented.

The formal secondary curriculum consists to a large extent of materials related to the exams managed by the Caribbean Examinations Council. The CXC provides syllabi to help guide students' preparation for the examinations. To date, these documents are used as the only instructional guides from Forms 3 to 5 (UNESCO, 2014b, p. 83).

While it is common for secondary schools to issue diplomas to graduates, it is interesting to note that the MOE neither recognizes the quality of student achievement nor regulates compliance with the requirements of the curriculum by issuing an SKN National Certificate or similar credential at the conclusion of any stage of schooling.

The White Paper

The White Paper published by the MOE in 2009 demonstrated a concerted attempt by the government, and the MOE in particular, to improve and modernize the curriculum. Indeed, curriculum is referred to as a 'thread throughout the White Paper' (MOE, 2009, p. 12). The stated objectives for primary education presented in the paper seem somewhat limited: the basic skills objectives are restricted to 'literacy, oral expression, numeracy, problem-solving and teamwork' (ibid., p. 41), excluding information technology, media literacy and higher-order skills such as research and analysis. However, the general thrust of the paper in the primary area is 'to provide students with a wide range of relevant, stimulating and challenging experiences and activities that develop academic, social and physical skills that students need to succeed in life' (ibid., p. 42).

In 2013, as part of a system-wide response to the White Paper, the CDU began a process of 'curriculum review'.[5] However the parameters for the review are unclear and no document formally describing the rationale, terms of reference and timeline was provided during the mission. Consequently, the CDU finds itself in the unusual position of needing to conduct a review without having in place a curriculum policy framework, other than the various curriculum-related references made in the White

5 The review team was informed that there was a draft National Curriculum Policy document; however, during the assessment phase, the policy framework was neither endorsed by the Minister nor shared with review team. Consequently, the review did not carry out its analysis.

Paper. Quite sensibly, the CDU has therefore decided to write a 'curriculum policy paper' as part of the review process.

While it may be possible to do this, it should be noted that the positions taken on a broad range of curriculum-related issues by the authors of the paper will not in fact be policy until approved by the Minister or government. Under these circumstances, it is almost impossible for the review to make any progress. For the curriculum review to be properly planned, it will be necessary for the Minister to make a range of policy decisions that will achieve, when enacted, the curriculum philosophy and objectives contained in the White Paper. One section of the White Paper may provide some guidance for this exercise (emphasis added):

> The primary school curriculum will expand experiences for students in **physical education, music and art, character education, volunteerism, technology, as well as exposure to trade skills**. **Physical education** will give students a good basis for health and wellness that they will carry with them throughout life. Students' creative side will be developed through **singing, music and art**. **Character education** will emphasize principles of **honesty, responsibility, courage, respect for others, anger management and conflict resolution**, thus teaching them to be responsible citizens. **Basic parenting and family concepts** will be introduced and presented to the young children in exciting ways, including **stories, films, pictures, discussions and debates**. Children will be led to develop '**parenting and family manuals**' to share with their parents.
>
> The use of **technology/computers and the Internet** will be strengthened to enable students to function in the computer world in which they live. In keeping with the need to motivate boys, emphasis in curriculum reform will focus on **making learning as exciting as possible**. It is believed that, if teachers are excited about their subjects, then they would be better able to excite their students about the subject. Curriculum reform at the primary level will seek to use and enhance students' natural curiosity. (MOE, 2009, pp. 44-45)

Having stated the Ministry's position on these matters, however, the White Paper makes no mention in the section that follows (called 'Action Agenda') of the actions that should be taken to expand and enrich the curriculum in the ways described. The Primary Education Action Agenda focuses on such matters as attendance and retention, promotion, literacy targets, dyslexia, student support and community collaboration – with no reference to the range of new subjects and related curriculum documentation to be developed, and no suggestion for how the curriculum should be arranged to accommodate these new priority learning areas. In addition, no

reference is made to implications for implementation, such as the training of teachers and the provision of resources and equipment.

Rather, it is implied that such learning will be incorporated into after-school programmes, with the clear implication that they are not to be considered part of the mainstream curriculum. The White Paper states that the primary aim of these extra-curricular activities is to develop the following 'skills', particularly in high-risk children (MOE, 2009, p. 52):

- Conflict resolution
- Self-esteem
- Mutual respect
- Moral development
- Peer pressure
- Gender and sexuality
- Communication skills
- Health and wellness
- Community responsibility
- Time management

It is not clear from the arguments presented in the White Paper why the development of these skills does not underpin the mainstream primary (and secondary) curriculum. Nor is it clear in what sense 'self-esteem', 'mutual respect', 'moral development', 'gender and sexuality' and 'peer pressure' are skills. Nevertheless, the general requirement to broaden and update the curriculum is a clear intention of the White Paper.

The review team identified nine policy issues in the area of curriculum development:

1. The narrow nature of intended and implemented curriculum
2. The need for a clear theoretical underpinning for the curriculum
3. Curriculum 'overload'
4. Lack of performance or achievement standards
5. Absence of cross-curricular learning areas
6. Imbalance in the curriculum and subsequent lack of focus on competency
7. Textbook quality
8. The need to face the curriculum implications of streaming
9. Lack of an overarching assessment policy

The sections that follow discuss each of these policy issues in detail and offer policy recommendations to address each issue.

Policy Issue 1: Curriculum scope

One feature of the SKN curriculum in which it departs most significantly from international norms and standards is the narrowness of prescribed learning experiences. There appears to be no overarching document for the curriculum that describes specific MOE requirements as to breadth, including the allocation of hours per week to the mandated subjects.

Evidence

In primary school, the 'intended' curriculum consists of the curriculum guides for the four core subjects – language arts, mathematics, science and technology, and social studies. It may also be argued that students are 'intended' to have some experience in the arts and physical education, and schools generally make some provision for this by engaging other Ministry or agency staff.

It was consistently claimed during the mission that this very limited 'intended' curriculum is narrowed even further by the Test of Standards. Schools generally feel considerable pressure to ensure that their students perform well in these tests, and so 'teaching to the test' was reported as widespread. This situation is exacerbated by the number of interruptions to scheduled school days by various types of events in which the school is obliged or agrees to participate. When, as a result of these interruptions, teaching and learning time is reduced, it is the non-core (non-examinable) parts of the curriculum that are sacrificed. The actual implemented curriculum then appears very narrow indeed.

Discussion

Most curriculum models for primary schools seek to provide a very wide range of experiences for students. While there may be an emphasis on the acquisition of specific skills, such as literacy and numeracy, the following list represents a fairly typical approach to defining subject areas:[6]

- English (or mother tongue)
- Mathematics
- Science
- Social sciences
- Modern languages

6 It should be noted that there are variations on this approach, including combining subjects into broader learning areas (like combining science and technology). Nevertheless, the list provided is a common representation of the range of content within modern curricula.

- The arts
- Technology
- Physical education and health

In addition to designating these areas and developing curriculum and materials to support implementation, it is very common for curriculum authorities to stipulate the minimum hours of study per week or per year for each subject in each grade. This time allocation is indicative of the relative importance placed on each subject.

Most significantly, it is expected that learning in all subjects (or learning areas) will be timetabled into the school schedule so that all students receive a broad learning experience, similar to that envisaged in the White Paper. In most cases, no listed subject is viewed as being 'extra-curricular'.

POLICY RECOMMENDATIONS

RECOMMENDATION 1.1 BROADEN THE COMPULSORY CORE CURRICULUM IN PRIMARY AND LOWER-SECONDARY GRADES TO ENSURE THAT ALL STUDENTS EXPERIENCE FORMAL LEARNING IN AN EXPANDED RANGE OF SUBJECTS

The provision of formal curriculum documents (in the form of subject standards) in only four subjects in primary years and for (currently) only two subjects in Forms 1-3 sends clear messages to schools about which parts of the curriculum have priority status. No matter how forcefully expectations about teaching and learning in the arts or health and physical education might be expressed, the fact that there is no formal curriculum for these subject, no hours prescribed for their study and no teachers specifically trained or employed to teach them will inevitably lead to schools marginalizing these important learning areas.[7] This situation is further exacerbated by the examination system that focuses exclusively on those subjects for which the curriculum guides exist.

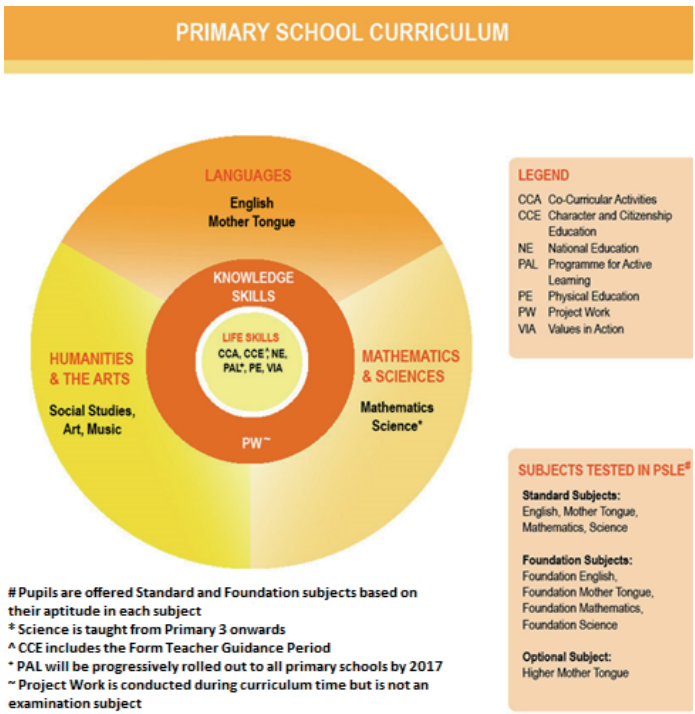
There is an identifiable trend around the world to rationalize the number of subjects to be studied (particularly in primary schools), while ensuring that a broad and general education is mandated. This rationalization is often achieved by consolidating 'subjects' into a more manageable number of 'learning areas'. New Zealand, for example, in order to achieve its aim of a 'broad, general education', mandates study in eight learning areas: English, the arts, health and physical education, learning

7 In Nevis, there are prescribed hours and teachers assigned at schools for physical education.

languages, mathematics and statistics, science, social sciences, and technology' (New Zealand MOE, 2007).

In Singapore, subjects are grouped into three broad learning areas, as illustrated in the diagram below. The outermost ring of subjects is meant to 'ensure that students have a good grounding in content across different areas of study' (Singapore MOE, 2016).

Figure 8: Singapore's curricular learning areas



Source: Singapore MOE, 2016.

Similarly, in the state of New South Wales in Australia, students in primary school are expected to receive formal teaching in the following seven Key Learning Areas (KLAs) (BOSTES, 2016):

- English
- Mathematics
- Science and technology

- Human society and its environment
- Personal development, health and physical education
- Creative arts
- Languages

This range is expanded in the lower-secondary curriculum.

In all of these examples, the overall aim of the curriculum is to provide a broad range of learning experiences that encompasses all of the traditional subject disciplines. Syllabuses are provided in all subjects, and the subjects themselves are presented as being of equal status and importance. The MOE in SKN should consider such models and expand the range of subjects mandated for study in primary and lower-secondary schools.[8]

Policy Issue 2: Curriculum theory

Another characteristic of a good-quality curriculum is that it is underpinned by and reflects modern and respected theoretical approaches to teaching and learning, and acknowledges the stages of child development. The SKN curriculum consists of a limited collection of 'guides' that contain no reference to a consistent pedagogy or learning theory.

Evidence

Although there are no references to learning theory at all, it would seem that the SKN curriculum reflects a 'behaviourist' theory (in that it is the role of the teacher to transfer information and knowledge to fundamentally passive learners), implied through the simple listing of knowledge and skills contained in the guides. This approach is generally seen as irrelevant to modern curriculum design and construction.

Discussion

It is common for modern curricula to reflect a 'constructivist' approach to learning. This theory of learning (attributed to and developed by Piaget, Vygotsky, Dewey, Bruner and others) sees learners as active constructors of their world view, rather than passive recipients of information (UNESCO-IBE, 2013). Learners link new information to their existing and evolving construction of reality.

8 This is not to say that subjects mandated for study in, for example, lower-secondary school should not include electives, as some schools may wish to arrange their curriculum to allow students to select and study subjects of interest to them.

In addition, modern curricula tend to acknowledge and incorporate the work of such theorists as Howard Gardner (who postulates that people are capable of seven ways of viewing the world, and argues the importance of recognizing 'multiple intelligences'), and the modernized version of Benjamin Bloom's taxonomy of educational objectives, which illustrates a progression towards increasingly higher order cognitive skills.

The recognition of these works has profound implications for curriculum in both its structure and content. An articulation of a clear theoretical underpinning also lays the foundation for a clear curricular vision that currently seems absent in SKN.

POLICY RECOMMENDATIONS

RECOMMENDATION 2.1 DEVELOP AND ARTICULATE A CLEAR THEORETICAL UNDERPINNING FOR THE CURRICULUM THAT WILL GUIDE ALL FACETS OF ITS DEVELOPMENT

It is important that curriculum developers and teachers know and understand the approach to learning on which the curriculum is based. While it is not always the case that national curricula explicitly articulate a specific learning theory, it could be argued that most modern curricula are underpinned by a constructivist theory of learning.

The UNESCO International Bureau of Education (UNESCO-IBE) describes 'constructivism' as a learning theory that places the learner at the centre of the educational process, on the understanding that the learner actively constructs knowledge rather than passively receives it. Thus an individual's knowledge is a function of one's prior experiences, mental structures and beliefs that are used to interpret objects and events.

Such an approach naturally has significant implications for curriculum developers who need to understand the theory and take it into account when selecting and arranging content, as well as in giving advice to teachers about how to design lessons and learning activities that will translate the theory into practice. It also has important implications for teachers in their day-to-day work as they develop and implement more student-centred approaches, as well as for textbook developers.

It may be that the MOE adopts a learning theory other than constructivism to be the basis for its approach to curriculum design and to teaching and learning in classrooms. The important point to note in this context is that the learning theory and the rationale for its selection should be clearly articulated, so that a consistent approach to teaching and learning is fostered throughout the curriculum.

Policy Issue 3: Curriculum overload

The issue of 'overload' is clearly a pressing one for SKN, and it is the responsibility of the authorities to develop an effective and achievable solution. However, **this is an example of an issue that the CDU cannot pursue without the direction and guidance of a policy on the matter.** The CDU could research and develop an informed and evidence-based position for the government's consideration, based on which clear policy recommendations could be made. Once a policy determination on the matter is made, the way would be clear for the CDU to develop a new model and set of guidelines for subject experts to use in revising existing curriculum guides and developing guides for new subjects as appropriate.

Evidence

One of the most frequent criticisms of the SKN curriculum heard during the review mission was that it is 'overloaded'. When pressed for details, respondents generally felt that the amount of knowledge and information contained in the guides was disproportionate to the amount of time available in schools. As a result, teachers tended to rush through the content with a view to ensuring that it was all 'taught' (as opposed to 'learned'), a situation that often became critical as the time for the Test of Standards approached.

Discussion

Curriculum 'overload' is a very common challenge to contemporary curriculum development. In most cases, the issue arises from a tendency to add new material to the curriculum over time, most commonly in the form of additional topics or new priority areas (such as HIV/AIDS awareness) without removing an equivalent amount of content from the curriculum to compensate.

It could be argued that the issue is most acutely experienced in curricula that are dominated by traditional content. In other words, if the curriculum consists of lists of information to be learned and remembered, usually with limited attention to related skills, adding to the content over time simply adds to the workload of both teachers and students. This situation is exacerbated in SKN by the apparent lack of clear directions to schools about the amount of time to be allocated to each subject in each grade.[9]

9 During the mission conducted in November 2014, no information was provided to the author about specific time being allocated to each subject in each grade. While this may exist, it was not mentioned to the author, even in the context of discussing curriculum 'overload'. It is therefore assumed that no such direction has been given to schools.

There are a number of approaches that can be taken to address this issue. One is to identify a 'core' of content that all students need to study and learn, and divide the remainder of the content into a number of 'elective' topics or themes of which students are required to study a set number.

Another, more contemporary approach is to recognize the importance of various subject-related competencies and to focus on the development of those competencies, rather than on the lower-order skills required to simply memorize large amounts of information. This focus on competency then enables curriculum developers to completely rationalize the content and rearrange it in ways that will promote progression to higher-order skills of research, analysis, synthesis, evaluation, critical thinking and the creation of new perspectives. In other words, the aim is to design a curriculum that uses relevant parts of the traditional content as a means to promote 'depth' of learning, rather than focusing on the lower-order skills of remembering and reproducing a large amount of existing information.

POLICY RECOMMENDATIONS

RECOMMENDATION 3.1 ALIGN THE EXPECTATIONS OF THE CURRICULUM MORE CLOSELY WITH THE TIME AVAILABLE TO DELIVER THE CURRICULUM

The issue of 'overload', whether real or perceived, is a significant one, as it places undue pressure on teachers and students, especially in the context of the very demanding examination regime currently in place in SKN. It is therefore recommended that the MOE take steps to address the issue as a matter of urgency. This can be done in any one of a number of ways. For example, the MOE could:

Conduct a review of the amount of content in each subject and grade, and map the content against time generally assigned in schools to teach the content. Based on the outcomes of this mapping, the CDU could then be assigned the task of rationalizing the content by deleting some topics or other material.

Develop a curriculum for each subject that focuses more directly on both subject-related and generic competencies. The underlying assumption of such an approach is that, by developing learning competencies (such as researching, analysing and synthesizing information, communicating results and so on), students acquire lifelong learning capabilities. When students acquiring the ability to learn in a deeper and more meaningful way, the need to memorize large amounts of information is reduced because they can seek out relevant information as they need it. This 'frees up' students and teachers, allows for deeper learning of a reduced amount of content

and develops transferrable learning skills. In effect, the effort invested in teaching and learning is made more efficient and effective, and students are equipped with learning competencies that will last a lifetime.

While the second option above is more complex and requires more resources and effort, it will also result in a curriculum that is more consistent with contemporary trends and standards.

Policy Issue 4: Student performance standards

The term 'standards' has two fundamental meanings in the context of curriculum development. Firstly, in relation to the content of curriculum, it can mean that the knowledge and skills to be developed apply to all students in all schools. In other words, the content to be delivered is 'standardized' across the system.

The second common meaning of the term relates to levels (or 'standards') of achievement by students. These 'performance' or 'achievement' standards are generally descriptions of various levels of student knowledge or skills at some defined point – such as at the end of each grade.

A good-quality, contemporary curriculum contains both content and performance standards.

Evidence

The current curriculum of SKN, as depicted in the curriculum guides for the core subjects, could be characterized as a series of content standards. The purpose of the guides is to describe the knowledge and skills that all students are expected to learn or acquire in each grade. However, the guides contain no information for teachers (or students, for that matter) about how to judge the quality of each student's learning.

Discussion

Developing performance standards for each subject is not a simple task. It requires detailed input from teachers about how to describe minimum acceptable standards, and then to describe various levels of student performance that exceed those minimum standards. This is a process that should be undertaken after the content – including the knowledge, skills, dispositions and values to be learned – has been defined, organized and linked to the competencies specific to the subject. Only then can work on performance standards be undertaken in any meaningful way.

POLICY RECOMMENDATIONS

RECOMMENDATION 4.1 PROVIDE TEACHERS WITH DESCRIPTIONS OF WHAT IS EXPECTED OF STUDENTS IN EACH SUBJECT AND GRADE

The current curriculum guides in SKN contain what might be considered content standards, insomuch as they 'standardize' the content to be delivered in schools across the country. These guides, however, provide no information to teachers about the expected levels of achievement of students. There is no indication of what can be judged as a minimum standard of achievement expected for each grade, or of what might be seen as very good or excellent achievement.

It is therefore assumed that the only accurate indicator of student achievement on which teachers can rely are the Test of Standards and Common Examinations that are conducted at the end of each grade from Grade 3 to Form 3. These, of course, provide no useful information for teachers to guide their teaching during the year.

The MOE should give consideration to ensuring that all curriculum guides include information that assists teachers in judging their students' performance. This could be accomplished in one of two ways:

- Incorporate descriptors of minimum performance and various iterations above the minimum into the guides themselves
- Produce and distribute a booklet of some kind, as a companion to the guides

This, of course, would provide only limited information to teachers because of the current knowledge-based content of the curriculum, and might only be expressed as some kind of percentage score to be expected on knowledge-based tests. Information could be far more sophisticated and useful if it were to describe performance standards for the full range of outcomes expected of a curriculum: namely knowledge, skills, values and attitudes, which may be collectively referred to as competency standards.

Policy Issue 5: Cross-curriculum learning areas

There is no doubt that the traditional subjects – which might be thought of as 'vertical' components of the curriculum – remain the predominant way of organizing the curriculum. They normally provide, in some form, a common thread of learning from early childhood through to upper-secondary school, and systems largely organize staffing and other resources around these subjects.

However, across the world curriculum developers are realizing that the traditional subjects do not include all of the content required for a comprehensive twenty-first-century education. It is an increasingly common trend for these 'vertical' components to be supplemented by new areas of learning. These new areas do not fit neatly into any one of the traditional subjects; rather they are best integrated into the curriculum as 'horizontal' components, in that they are relevant in different ways to a range of subjects. It therefore becomes the responsibility of all subjects to teach the content of these new areas.

Evidence

The current curriculum is composed entirely of 'vertical' components in the form of the traditional subjects. It does not have any 'horizontal' or cross-curricular components.

Discussion

In its curriculum glossary, UNESCO-IBE defines the concept of 'cross-cutting' themes as:

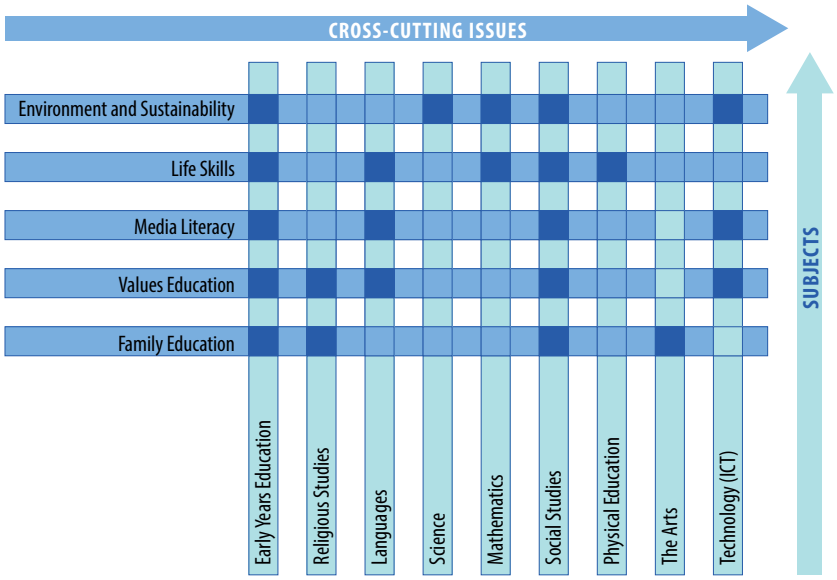
> Important curriculum content which is to be covered across subjects (or disciplines or learning areas), rather than being taught and learned in one particular subject. These themes can connect programme content across disciplinary boundaries; enrich the curriculum without overloading it through the introduction of additional teaching subjects; and facilitate interdisciplinary thinking and collaborative learning. Examples include human rights, gender issues, peace education and education for sustainable development. (UNESCO-IBE, 2013, p. 15)

One characteristic of these new areas is that they are, to a large extent, determined by the social, cultural and economic needs of individual countries. While mother tongue, mathematics, science, social studies, modern languages, music and so on are common to most curricula, it is entirely at the discretion of individual countries to look at its own priorities to determine which 'horizontal' elements are most relevant. In the new National Curriculum of Australia, for example, the cross-curriculum priorities are (ACARA, 2015a):

- Aboriginal and Torres Strait Islander Histories and Cultures
- Asia and Australia's Engagement with Asia
- Sustainability

One way of representing this model of curriculum as comprising 'vertical' and 'horizontal' components is illustrated in the diagram below. The intersections in navy blue indicate the subjects where each of the cross-cutting issues is likely to have most relevance.

Figure 9 Illustration of horizontal and vertical curricular components



While identifying priority areas for SKN should be the result of extensive consultations, those mentioned during consultations undertaken as part of the review mission included:

- Environment and sustainability
- Citizenship and civic responsibility
- Information and communication technology
- Human rights
- Policy recommendations

RECOMMENDATION 5.1 INCLUDE CROSS-CURRICULUM LEARNING IN AREAS THAT ARE A HIGH PRIORITY FOR THE COUNTRY

While contemporary curricula continue to use traditional subjects as their main structural or organizing component, there is a strong trend towards also incorporating cross-curriculum learning areas within the curriculum architecture. Some examples of these components are noted in the section. The notable characteristic of this trend is that this new content is no longer seen as being of minor importance. Rather, each priority cross-curriculum learning area is seen as consisting of important content in its own right.

The New Zealand curriculum, for example, places cross-curriculum learning in the context of a focus on the future (New Zealand MOE, 2007):

> Future-focused issues are a rich source of learning opportunities. They encourage making connections across the learning areas, values and key competencies, and they are relevant to students' futures. Such issues include:
>
> - **sustainability** – exploring the long-term impact of social, cultural, scientific, technological, economic or political practices on society and the environment
> - **citizenship** – exploring what it means to be a citizen and to contribute to the development and well-being of society
> - **enterprise** – exploring what it is to be innovative and entrepreneurial
> - **globalisation** – exploring what it means to be part of a global community and to live amongst diverse cultures

Any future curriculum development activities in SKN should ensure that the learning needs of students are the primary focus, and the first question to be asked in this regard is whether the range of subjects (the 'vertical' components) provide students with all the skills, knowledge, values and dispositions they need to become successful citizens of their country and, indeed, the world. If the answer to this question is 'no', the country should determine which areas of cross-curricular learning (the 'horizontal' elements) should be incorporated into the curriculum structure.

Should the MOE adopt this recommendation, it is critical that broad consultations are conducted so that areas of high priority specific to SKN are identified. Because of its small geographic size and population, the country may consider, for example, that 'national identity' is a key priority; or, because of the emergence of a gang culture among the nation's youth, there may be a need to focus on appropriate civic behaviour and civic responsibility. It is important that these priority areas are determined within the social, economic and political context of SKN.

Policy Issue 6: Curriculum balance and focus on competency

It is critical to note that incorporating generic, key competencies is not simply an addition to an already overcrowded curriculum. The critical outcome of incorporating these competencies is a deeper understanding of content and a capacity to apply knowledge, skills, values and dispositions to a range of real and meaningful situations and contexts.

Evidence

The current curriculum of SKN consists of guides that list content to be taught and learned in the core subject areas. This content appears to consist largely of knowledge and, to a more limited extent, relevant skills.

Any curriculum built on this model would not meet current curriculum expectations of balance. Modern curriculum attempts to ensure that knowledge, skills, values and dispositions are represented in appropriate balance. Moreover, many modern curricula place these elements in the context of competence.

Discussion

UNESCO-IBE defines competence in the following way:

> Within the European Union area a competence is defined as a combination of knowledge, skills and attitudes appropriate to the context. Competence indicates the ability to apply learning outcomes adequately in a defined context (education, work, personal or professional development). Competence is not limited to cognitive elements (involving the use of theory, concepts or tacit knowledge); it also encompasses functional aspects (involving technical skills) as well as interpersonal attributes (such as social or organizational skills) and ethical values. (UNESCO-IBE, 2013, p. 12)

Many educationally successful countries use a defined set of generic key competencies as an important focus for the whole curriculum. Some examples are listed in the table below:

Table 6 Sample of key competencies or capabilities

Country	Key competencies / capabilities
Australia	Literacy Numeracy Information and Communication (ICT) capability Critical and creative thinking Personal and social capability Ethical understanding Intercultural capability
Korea	Critical thinking and problem-solving Communication Innovation and creativity Investigation Cooperation
New Zealand	Critical thinking and problem-solving Using languages, symbols and texts Managing self Relating to others
Singapore	Decision-making Critical and media skills Information and communication skills

This 'competency approach' to learning has at its core a belief that producing competent young people is a primary objective of the education system. It in no way devalues knowledge, skills, values and dispositions. Rather it ensures that young people can use and apply what they learn to learn more effectively and to think more actively.

To raise the standard of its curriculum, and most importantly to make learning more effective, the MOE (through the CDU) should give serious consideration to adopting a curriculum model that values competency. It should consult widely to determine the generic key competencies that should be incorporated into a new model of curriculum guide and will become the responsibility of every teacher of every subject.

In the light of the range of issues raised above, and in particular given that each of those issues needs to be addressed through carefully considered policy decisions, it is difficult to understand how the curriculum review in SKN can proceed in its current form. In order to make informed judgements about the future of the curriculum, the CDU needs to be provided with a policy framework that provides clear decisions in relation to the following questions:

- Is the current range of core subjects adequate? Should other areas of learning that are currently regarded as 'extra-curricular' (physical education and health, the

creative and performing arts, modern languages and so on) be brought into the mainstream curriculum? If so, how will they be supported and how will learning be assessed? In this new curriculum pattern, what number of hours should be allocated to each subject in each grade?

- What is our curriculum vision? What are our core beliefs about learning and teaching? What model of curriculum should we adopt so that these core beliefs are reflected in every curriculum guide and, eventually, in every classroom and every lesson?
- What new model of curriculum can be put in place to reduce the current 'content overload'?
- How can teachers be advised and supported in determining standards of achievement or performance by their students?
- How will the current barriers between subjects be broken down so that learning for the students becomes more meaningful and holistic?
- Should new, cross-curriculum learning areas be incorporated into the curriculum? Which areas are important to the social, cultural and economic context of the country? How will they be incorporated into new curriculum documents?
- Should the curriculum focus on competency? How will competencies be incorporated into the revised curriculum?

Without such a policy framework, any curriculum review will lack direction and purpose. If such a framework is in place, a curriculum review can be targeted, purposeful and results-oriented.

POLICY RECOMMENDATIONS

The review team identified two policy recommendations to address this issue:

RECOMMENDATION 6.1 REVIEW THE CURRENT CURRICULUM WITH A VIEW TOWARDS ENSURING BALANCE OF KNOWLEDGE, SKILLS, VALUES AND ATTITUDES, AND AN APPROPRIATE FOCUS ON COMPETENCY

The curriculum of SKN focuses very clearly on knowledge, with some reference to subject-related skills. There appears to be no reference to deeper understanding,

values and dispositions (or attitudes), or any documentation about the development of students' competencies (either subject-specific or generic).

This focus on knowledge retention, reinforced by the current examination regime, creates an imbalance in the curriculum. A major objective of any review of the current curriculum should be to redress this imbalance so that knowledge, understanding, values and attitudes are given appropriate emphasis.

Modern curricula also emphasize the development of competency, both within the context of individual subjects and as generic key competencies.[10] Achieving a balance in the curriculum is critical to achieving the intentions of the White Paper:

> Curriculum review and reform at the primary level will continue to provide students with a wide range of relevant, stimulating and challenging experiences and activities that develop the academic, social and physical skills that students need to succeed in life. (MOE, 2009, p. 42)

It would also assist the MOE in achieving its own mission: 'To provide for all citizens and residents [...] a comprehensive course of lifelong education which would enable individuals to develop and achieve their full potential, allowing them to make meaningful contribution to National Development'.[11]

RECOMMENDATION 6.2 DEVELOP A CURRICULUM FRAMEWORK

One of the main challenges being faced by all education stakeholders in SKN is the apparent lack of high-level statements of aims, objective, principles and values that should form the foundation of all review, revision and development work in the sector. While there are parts of the White Paper that could be interpreted as providing this policy direction, the White Paper itself is largely an aspirational document that does not convey a comprehensive and cohesive curriculum vision.

It is therefore a major recommendation of this report that the MOE begin a systematic process of developing a Curriculum Framework, the main function of which will be to provide clear policy responses to curriculum-related issues identified during this policy review process.

10 In some examples (for example, the Australian National Curriculum), competencies are referred to as 'capabilities'.

11 Mission Statement of the Ministry of Education, from a poster on the wall in the CDU.

What is a Curriculum Framework?

A Curriculum Framework is a high-level, overarching document that regulates and provides direction to a wide range of issues related to teaching and learning. UNESCO-IBE defines a Curriculum Framework as:

> An overarching document that fulfils some or all of the following: places national statements of vision, economic development and education policy in a curriculum context; sets out broad aims and objectives of the curriculum at the various stages of schooling; explains the educational philosophy underlying the curriculum and approaches to teaching, learning and assessment that are fundamental to that philosophy; outlines the curriculum structure, its subjects or learning areas and the rationale for the inclusion of each in the curriculum; allocates time to various subjects and/or learning areas in each grade or stage; provides guidelines to subject curricula developers, teacher trainers and textbook writers; prescribes requirements for curriculum implementation, monitoring and evaluation. (UNESCO-IBE 2013)

The term can be used to refer to a document that specifies the general outcomes (to be attained throughout the grades), the specific outcomes (to be attained by the end of a given grade) and the achievement indicators (such as a representative list of the depth, breadth and expectations of the outcome) for a particular subject or subject area. It can also be used with reference to an educational stage or level (such as the primary education curriculum framework).

What is the structure of a Curriculum Framework?

There is no single structure for a Curriculum Framework. Should this recommendation be accepted, it is critically important that SKN develop a structure for its Framework that addresses the key curriculum issues, policies and questions that exist in its unique national context. While the list of functions provided in the definition above might serve as a starting point, the structure should be developed in close consultation with stakeholders across the education sector.

What are the advantages of a Curriculum Framework?

In the context of SKN, and taking into account the policy issues and challenges identified in this review, a national Curriculum Framework would achieve the following:

- Link the curriculum clearly and directly to national social and economic goals and priorities.
- Provide a clear vision and a set of values and principles that would guide all curriculum-related activities and decisions.

- Consolidate all curriculum policies, requirements and guidelines into a single regulatory document.

- Provide guidance to curriculum developers about expectations for individual subject guides and for other issues related to the documentation of the formal curriculum, in particular addressing such issues as the place of balance and competency development in the curriculum, as well as the philosophy of teaching and learning that underpins the curriculum. In this context, the Curriculum Framework could set out a template for developing subject guides that would be consistent with the overarching vision, principles and values, as well as a range of other matters.

- Set standards for school administrators, particularly in relation to how the curriculum should be delivered in schools, the time allocated to subjects in each grade and the breadth of subjects that students are expected to experience within the school timetable.

- Inform teachers about teaching and assessment strategies that are consistent with the philosophy of teaching and learning underpinning the curriculum.

- Inform a range of other stakeholders about what is expected of the curriculum and how these expectations will be met.

- Inform decisions about appropriate textbooks and other resource materials.

- Provide advice to teacher-training institutions about the standards of skills, knowledge and attitudes expected of teachers.

How should a Curriculum Framework be developed?

As the principal overarching document, the Curriculum Framework is a carefully constructed, public document. The development of such a Framework should be the first activity undertaken in any planned curriculum review and revision process. It is the means of identifying a range of curriculum-related policy issues to which clear policy responses must be developed and provided in order to complete and implement the Framework itself. The Framework should be the outcome of a planned, systematic and efficient process of broad consultation across all education stakeholders.

It is not possible to state a time frame for the development of a Curriculum Framework. However, given the absence in SKN of a clear policy direction on a number of important issues, this is an urgent priority. It is suggested that sufficient resources be

applied to the process in order for a Curriculum Framework, or at least an advanced working draft, to be completed within six months of this recommendation being accepted.

Policy Issue 7: Textbook quality

Textbooks are a key strategy to support the curriculum and to ensure effective teaching and learning. This is particularly true in the context of SKN, where significant numbers of teachers are untrained or have received minimal training. In these circumstances, there is a particularly heavy reliance on textbooks and a reluctance to deviate from the written text. It is therefore critical that textbooks are of the highest quality.

Evidence

During the review mission, only one textbook (a Grade 5 language arts textbook) was provided for review. This textbook was in some ways consistent with the current curriculum, in that it covered a range of required content. However, it did require reading comprehension and various grammatical exercises to be undertaken without any apparent context.

Discussion

If SKN is to revise its curriculum and choose to base its curriculum on a progressive, constructivist approach to learning, for instance, textbooks such as the one reviewed will be of little value. It will be critical that new textbook policies be developed to ensure that textbooks are consistent in philosophy and approach, and that the curriculum is given its best chance to succeed. Given the small size of the textbook market, it may be that the MOE will need to consider alternatives to the traditional textbook model in some subjects, such as a heavier reliance on customized lesson-support materials and internet resources.

POLICY RECOMMENDATIONS

RECOMMENDATION 7.1 DEVELOP A CLEAR SET OF STANDARDS TO GUIDE THE SELECTION PROCESS AND THE QUALITY OF TEXTBOOKS

As textbooks are the main resource to support teachers and students in achieving curriculum outcomes, it is critical that they meet prescribed standards, and that procurement and distribution processes are effective and equitable. This will emerge

as a particularly significant issue as the current curriculum guides are reviewed and revised, especially if the revision is consistent with a new approach to curriculum as outlined in the previous recommendations (including the development of a curriculum vision, objectives, values and principles in the context of a Curriculum Framework, and the adoption of a constructivist approach to learning).

It is acknowledged that the textbook market of SKN is small, and that it is not possible to write and produce textbooks locally. This does not mean, however, that the goal of consistently supporting the approach that underpins the curriculum should be diluted or distorted by the provision of inappropriate textbooks. Every effort must still be made to identify and recommend textbooks that truly support the vision, values and principles of the curriculum.

Innovative approaches to this issue must be found, including, for example, the development of local 'supplements' that might customize textbooks to the national context of SKN.

In addition, policy must be developed to guide the operation of the Student Education Learning Fund (SELF) to ensure that principles of equity and quality are followed across the country in terms of textbook distribution, and that the SELF committee is aware of its responsibilities in applying this important policy.

Policy Issue 8: Curriculum implications of streaming

While streaming is to some extent a management issue, it should also be perceived as a curriculum issue because of its impact on the quality of learning. Of particular concern is the undifferentiated streaming that occurs as students move from Grade 6 to Form 1.

Evidence

It was explained during the consultations that, as the first stage in the streaming process, the results from the Grade 6 Test of Standards are used by the CDU to allocate students to secondary schools, so as to ensure that the Form 1 cohort of each school is of approximately equal ability. This apparently is to avoid previously experienced problems of public perceptions of 'good' and 'bad' secondary schools.

In the second stage of the process, it is common practice for secondary schools to group students into Form 1 classes based on the average of their results from all the Grade 6 Tests of Standards. This raises the clear and possibly common issue of students who are, for example, very good in language arts (or at least have performed

well in the one-off Test of Standards) but only of average mathematical ability being in the top stream for mathematics. This could lead to frustration, loss of confidence and poor self-perception as a mathematics learner.

Discussion

With regard to streaming generally, there may be some benefit in the practice of streaming for some of the top-performing students. The negative impact of the practice on the middle- and lower-ability students, however, should be carefully monitored. Without the benefit of being exposed to more talented students, who generally tend to be more enthusiastic about the subject, students might adjust the expectations they have of themselves as learners to the stream in which they are placed. At least on the surface, this practice appears to run counter to the stated goal of the CDU: to 'facilitate the full actualization of each student's potential through the creative use of carefully crafted curriculum' (Hanley, 2001).

There was a strong view expressed during the consultations that both policy and practice in this area should be reviewed.

POLICY RECOMMENDATIONS

RECOMMENDATION 8.1 REVIEW THE POLICIES RELATED TO STREAMING TO ENSURE THAT NO STUDENT OR GROUP OF STUDENTS IS DISADVANTAGED BY THE PROCESS

While the practice of streaming might be considered a management issue, its application may also have important implications for the curriculum. For example, curriculum developers should provide advice within the various curriculum documents (including the Curriculum Framework, if developed, and the curriculum guides) about how the curriculum can be differentiated to accommodate the various levels of ability into which students are grouped.

Also of concern from a curriculum perspective, however, is the impact that streaming in its current form has on students' self-esteem and in their perceptions of themselves as learners. This is particularly true if the current practice of streaming based on average test scores across the four core subjects is maintained. This practice must inevitably lead to students perceiving themselves as a particular 'standard' of learner. It must also encourage mistaken assumptions that students are equally 'good' or 'poor' at all subjects and reduce opportunities for students to reach their potential in individual subjects.

Consequently, it is recommended that policy and practice in this area be reviewed and, if necessary, amended. At the very least, the possibility of differential streaming – based on performance in individual subjects rather than on an average score in all subjects – should be investigated. Most important, however, is that practice of streaming and related procedures be reviewed to ensure that it is achieving the desired outcomes, based on the best information available (including inputs from Grade 6 teachers) and does not result in disadvantage to any student or group of students.

Policy Issue 9: Overarching assessment policy

Evidence

There appears to be no overarching and comprehensive policy on assessment of student learning in SKN. This means that teachers are left entirely to their own training and experience to develop and institute a programme of assessment in their classrooms, without the benefit of any framework regarding formative and summative assessment.

Discussion

Most modern curricula are complemented by assessment frameworks that help teachers to understand their role as assessors of student achievement, and to understand assessment as a process. Every assessment activity should have an identified purpose that then determines the form the assessment should take. Teachers as assessors should also bear in mind the potential audiences for assessment results, and the kinds of information that should be gathered to achieve the purposes and convey accurate information to intended audiences.

While this appears to be a very formal process, it need not necessarily be so. What is important is that teachers are aware that assessment happens daily in their classrooms, and can contribute in very meaningful ways to improved teaching and learning. Most importantly, teachers need to be trained away from thinking that assessment and examinations are synonymous terms.

All these matters should be addressed in a clear and comprehensive policy about assessment that should be applied in all schools and in all classrooms.

POLICY RECOMMENDATIONS

RECOMMENDATION 9.1 DEVELOP AND IMPLEMENT A POLICY TO ENSURE THAT ASSESSMENT PRACTICES ARE TARGETED AND EFFECTIVE

There was significant anecdotal evidence arising from consultations during the review mission that the notion of 'assessment' in SKN largely equates to 'examinations', in particular the Test of Standards. Very little reference was made during consultations to the teacher's role as classroom assessor, or the use of formative assessment techniques and strategies. In most cases it was explained that teachers generally use the summative classroom test as an assessment tool and describe student achievement in terms of a score derived from these tests.

It is important that a more comprehensive and contemporary approach to assessment is documented through an overarching, system-wide assessment policy. This policy should be built on the following principles of assessment:

- Assessment is a key responsibility of teachers.
- Assessment can be both summative and formative.
- Every assessment has a particular purpose and should be specifically designed to achieve that purpose.
- Assessment is a process rather than an event. The process, in broad terms, should consist of:
  - Determining the purpose of the assessment
  - Designing and implementing appropriate activities in order to gather data
  - Making judgements about that data as they relate to individual student performance against other achievement standards or the performance of other members of the group (either class or grade)
  - Using those judgements to achieve the purpose of the assessment (for example, to guide future teaching and learning, or to report progress to parents)
- Assessment is a broad category of educational activity, with examinations being just one form of assessment.

Particular attention will need to be paid to assessment in any newly introduced but non-examinable subjects. For example, if subjects in the arts become mandatory and a public examination in those subjects is not deemed necessary or appropriate, some system of school-based assessment will need to be developed. Achievement standards will need to be developed in these subjects, so that teachers can determine whether students have achieved some satisfactory minimum standard, and how achievement can be graded. In addition, achievement of a minimum standard for each student

may need to be reported to the CDU or some other authority to ensure that minimum curriculum requirements regarding breadth of study have been achieved.[12]

Summary

The following table summarizes the policy issues and corresponding recommendations discussed in this chapter.

Table 7: Policy issues and recommendations for curriculum development

Policy Doman: Curriculum Development (CD)			
Policy Issues		Policy Recommendations	
CD 1	Curriculum scope	**CD 1.1**	Broaden the compulsory core curriculum in primary and lower-secondary grades to ensure that all students experience formal learning in an expanded range of subjects.
CD 2	Curriculum theory	**CD 2.1**	Develop and articulate a clear theoretical underpinning for the curriculum that will guide all facets of its development.
CD 3	Curriculum 'overload'	**CD 3.1**	Align the expectations of the curriculum more closely with the time available to deliver the curriculum.
CD 4	Student performance standards	**CD 4.1**	Provide teachers with descriptions of what is expected of students in each subject and grade.
CD 5	Cross-curriculum learning areas	**CD 5.1**	Include cross-curriculum learning in areas that are a high priority for the country.
CD 6	Curriculum balance and focus on competency	**CD 6.1**	Review the current curriculum with a view towards ensuring balance of knowledge, skills, values and attitudes, and an appropriate focus on competency
		CD 6.2	Develop a Curriculum Framework
CD 7	Textbook quality	**CD 7.1**	Develop a clear set of standards to guide the selection process and the quality of textbooks.
CD 8	Curriculum implications of streaming	**CD 8.1**	Review the policies related to streaming to ensure that no student or group of students is disadvantaged by the process.
CD 9	Overarching assessment policy	**CD 9.1**	Develop and implement a policy to ensure that assessment practices are targeted and effective.

12 The issue of determining whether students have successfully completed courses that meet any new requirements of, for example, a Curriculum Framework, was not addressed during the review mission. This has therefore not been included as an issue in this report. However, some consideration could be given to, for example, a national certificate of completion of primary school. Eligibility for such a certificate could depend on results in examinations in the core subjects and data submitted by schools indicating whether the minimum standards for non-examinable subjects have been met by each student.

Chapter 4
Teaching and learning environments

Introduction

This chapter of the review is devoted to the policy domain of teaching and learning environments. In general terms, it focuses on the quality of teaching strategies and classroom activities (including planning and delivery of topics and lessons) by teachers in SKN, as well as on the quality of learning achieved by the students.

As a starting point, the scope of 'teaching and learning' is defined by the CBR, which identifies the following as issues within the domain of teaching and learning (UNESCO, 2014b, pp. 99-100):

- Framework for quality teaching and learning:
  - The framework for quality teaching and learning is underdeveloped and not fully functional
  - A framework for information and communication technology (ICT) integration has not been established
- Learning outcomes in context:
  - Learning support in mainstream schools is limited
  - Learning outcomes are not defined
  - Lesson planning is inadequate
  - Streaming limits learning opportunities and may contribute to student disengagement
- Equity in teaching and learning:
  - Equity in teaching and learning is not monitored

The general approach of this review was to consider the issues identified in the CBR, and to explore and validate them in the context of discussions, consultations and observations within the country, as well as in the context of global curriculum trends. A very broad approach was therefore taken to define the scope of 'teaching and learning', and all aspects considered to have a direct impact on the quality of classroom teaching and student learning were considered within this scope.

There is no doubt that the quality of teaching has a direct impact on the quality of student learning, as a number of summary studies have shown (Rowe, 2003; Darling-Hammond, 2000; Hattie, 2003). Several researchers have argued that teaching quality

is the most powerful determinant of student outcomes, more so than students' backgrounds and characteristics, or factors like class size, funding and teacher salaries:

> Whereas students' literacy skills, general academic achievements, attitudes, behaviours and experiences of schooling are influenced by their background and intake characteristics – the magnitude of these effects pale into insignificance compared with class/teacher effects. That is, the quality of teaching and learning provision are by far the most salient influences on students' cognitive, affective, and behavioural outcomes of schooling – regardless of their gender or backgrounds. Indeed, findings from the related local and international evidence-based research indicate that 'what matters most' is quality teachers and teaching, supported by strategic teacher professional development. (Rowe, 2003)

> The effect of poor quality teaching on student outcomes is debilitating and cumulative. [...] The effects of quality teaching on educational outcomes are greater than those that arise from students' backgrounds. [...] A reliance on curriculum standards and statewide assessment strategies without paying due attention to teacher quality appears to be insufficient to gain the improvements in student outcomes sought. [...] The quality of teacher education and teaching appear to be more strongly related to student achievement than class sizes, overall spending levels or teacher salaries. (Darling-Hammond, 2000)

Professor John Hattie's study into the impact on student achievement of a range of aggregated variables found that over 50% of the variance in student achievement was due to the students themselves: 'It is what students brings to the table that predicts achievement more than any other variable'. However, the next most important source of variance is the teacher: 'It is what teachers know, do, and care about which is very powerful in this learning equation' (Hattie, 2003).

It is therefore critically important to the quality of learning outcomes in SKN, as it is in any country, that the education system pay due attention to the quality of teaching in order to foster high-quality learning. This process involves, at the very least:

- Systemic understanding of and commitment to what constitutes 'quality teaching' in the context of SKN
- Articulating that view of quality teaching in a clear and accessible way
- Promoting the concept of quality teaching as a pillar of educational success
- Ensuring that all systems and processes related to teaching – including professional teacher training, CPD, teacher evaluation, and the performance appraisal of both teachers and schools – are based on the agreed model of 'quality teaching'

It is not the theoretical model of quality teaching and its implementation alone, however, that will lead to improvements in quality learning outcomes for students. Teachers need to be supported in the creation of physical learning environments in which students feel encouraged and stimulated. They need to have access to high-quality materials and adequate resources; they need the time to focus on their core responsibilities; and they need a curriculum that is flexible and stimulating, encourages them to use their professional judgement about what works best for their students, and through which they can strive towards relevant and meaningful learning outcomes.

The scope of 'teaching and learning' in this report therefore includes not only the quality of teaching processes in SKN schools (such as the strategies, behaviours and styles of teachers), but also the range of factors that directly impact the capacity of teachers to create enabling and inclusive environments within which effective learning can occur.

As in any country, there are a number of factors that determine the quality of teaching and learning that currently exists in SKN. These include the education traditions of the culture, the degree of freedom afforded teachers to try out new teaching strategies, the quality of training and resource support, and the general learning preparedness of students (such as their levels of literacy and numeracy and the value attached to learning and education within the home).

The information provided for this review (through observations, consultations and discussions) indicates that the country has a dedicated and professional teaching force. While there were anecdotal reports of ultra-conservative elements among teachers (such as the example of trainee teachers being very actively discouraged by older teachers from trying innovative teaching approaches), and while the full range of quality doubtlessly exists among teachers, the general feeling reported to the review team by, for example, deputy principals, is that the quality of teaching is very good.

However, it was difficult to establish during the assessment mission precisely on what grounds these observations were being made. With the exception of the teacher appraisal instrument referred to later in this chapter, there appears to be no formal position on what constitutes quality teaching in SKN.

The 2009 White Paper on Education Development and Policy 2009-2019 was referred to throughout the assessment mission as the guiding policy document for education reform. As a seminal document in the education reform process in SKN, it is surprising how little attention it pays to this key question of how to achieve a

high quality of teaching and learning in SKN schools. While the document embraces the notion that 'we must continually seek to raise the standard of teaching in order to promote success for all', very few references are made to what constitutes an acceptable 'standard of teaching' and there is little strategic information about how this will be achieved (MOE, 2009, p. 18).

Perhaps the closest reference to what constitutes good-quality teaching can be found in the section of the White Paper entitled 'Competency Profile of the Ideal Teacher', which outlines a range of characteristics of good teachers under the headings of Knowledge, Skills, Attitudes and Professional Conduct (MOE, 2009, p. 28). It can be argued that, while this might summarize what is perceived to be a good *teacher*, it makes little contribution to the notion of what constitutes good *teaching* in SKN. The majority of the White Paper's chapter on teachers focuses on administrative and procedural matters, such as recruitment, performance appraisal, career paths and the use of retired educators to supplement the existing workforce.

Similarly, the White Paper makes little reference to what the MOE considers to be 'quality learning' in SKN schools, and how improvements in that quality will be achieved. While some reference is made to broadening the curriculum in primary schools and an apparent directive that 'general competencies' are to be given priority in secondary education, this does not seem to be presented within a clear and cohesive set of learning objectives and strategies for teachers to use to implement the directive. While there may be some merit in the range of actions required by the White Paper, with regard to quality learning the paper appears to be fragmented and provides little guidance regarding strategic purpose and direction.

In referencing the quality of learning in SKN, there is a very heavy reliance on the results achieved in the Test of Standards to determine whether or not students are achieving curriculum outcomes. There appears to be no real value placed on classroom- and school-based assessment as a means of gathering real data about achievement in, for example, the affective domain of the curriculum or non-examinable subjects.[13] Similarly, there seems to be no attempt to validate results in the Test of Standards by supplementing scores with school-based assessment information.

The purpose of this chapter is to consider the range of factors that seem to be impacting the quality of teaching and learning in SKN, and to identify specific issues which, if addressed, will lead to improvements in the quality of both teaching and learning across the country.

13 For example, while there is some discussion of and reference to generic competencies, including work-related competencies, there appears to be no requirement of or support for teachers in developing those competencies through classroom activities or recognizing their importance through the assessment system.

The issues identified in the CBR provided the initial focus of the assessment mission undertaken in March 2015, one important objective of which was to 'validate' the observations and evidence presented in the CBR. However, through the consultations conducted during the mission, a number of other issues emerged that need to be considered in this domain. As a result, the list of issues considered to be important to this review has been expanded and regrouped under the following headings:

1. The absence of a Quality Teaching and Learning Framework (QTLF)
2. The need to promote and implement teaching strategies and create learning environments that are engaging and stimulating
3. The need for a more strategic and targeted approach to the integration of ICT into teaching and learning
4. The impact of streaming on students' learning and achievement
5. Constraints on teachers and the quality of the teaching process.

Policy Issue 1: Quality Teaching and Learning Framework

The review pointed to the absence of a QTLF as a policy issue in this domain.

Evidence

There are three main sources of evidence that point to the absence of such a framework: the absence of a philosophy of teaching and learning; the lack of an agreed set of competencies and standards that define quality teaching; and the absence of a clear definition of student learning outcomes. Each of these is discussed in turn below.

1. Absence of a clearly defined philosophy of teaching and learning

As noted in the chapter on Curriculum Development, there appears to be no well-considered and clearly articulated learning philosophy underpinning the written curriculum in SKN. A similar issue was noted by the review team in its attempt to identify any official policy or view about what constitutes 'quality teaching'.

2. Lack of an agreed set of competencies and standards that define quality teaching in SKN

Teachers in SKN are required to undergo an annual performance appraisal, and some indicators of what might be considered 'quality teaching' are to be found in the instrument used for this appraisal. The section of the instrument called 'Analysis of Teaching' contains four areas of proficiency (with a range of indicators listed for each area):[14]

14 A complete list of indicators used in the appraisal instrument can be found in Appendix 4.

- Classroom learning environment (20%)
- Lesson planning and preparation (30%)
- Instruction – engagement in the classroom (35%)
- Professional responsibilities (15%)

This document, however, is an appraisal instrument and could in no way be construed as a clear statement of quality teaching as it is interpreted in SKN. The instrument focuses on teachers and their behaviour, rather than on the teaching process itself. For example, there is no context provided for the indicators in the instrument in the form of a comprehensive and cohesive explanation of philosophy and principles, and no further explanatory documentation or manual was mentioned to the review team. The indicators are provided for appraisers to guide their observations and evaluations of documents and behaviour, and are not expressed as statements of belief about quality teaching.

For example, Indicator 3 in Section C ('Instruction – Engagement in the Classroom') is 'Provides feedback to students'. While providing feedback to students is inarguably good teaching practice, this statement does not attempt to describe the rationale for providing feedback, what constitutes quality feedback and how this varies according to context, or how feedback is a component of high-quality teaching and learning processes. Most importantly, it appears from the documentation that 'providing feedback' is the only characteristic of teaching that engages students. No mention is made of how the classroom activities interest students, cater to their interests, or encourage them to explore more deeply or share their experiences with others.

The most detrimental outcome of this approach to teacher appraisal is that not only are teachers given little guidance as to what the system expects of them in terms of 'quality teaching', it would appear that they are rewarded in the appraisal system for completing tasks and duties rather than for the real quality of their work.

3. Absence of clearly defined student learning outcomes

The CBR notes a number of important policy issues regarding student learning outcomes in SKN. These are:

1. Learning support in mainstreams schools is limited
2. Learning outcomes are not defined
3. Lesson planning is inadequate
4. Streaming limits learning opportunities and may contribute to student disengagement

In the opinion of this review, the overarching issue here is the absence of clearly defined learning outcomes. It is critical in any education system that all actors know what students are expected to learn and the standards they are expected to achieve. These are normally prescribed in the formal curriculum and, from that perspective, the issue is also addressed in the chapter on Curriculum Development.

With regard to teaching and learning, the impact of not defining what and how well students are expected to learn is very significant. Without clearly defined learning outcomes and standards, for example:

- Teachers are unable to plan effective learning programmes
- Students do not know what they are expected to learn and what constitutes various levels of achievement
- Examination agencies cannot develop and apply standards-referenced assessment instruments
- Parents and employers find it difficult to understand and interpret reports and examination results

Discussion

There is a clear need in SKN for a more coordinated and strategic approach to improving the quality of teaching and learning. The discussion below addresses issues related to the quality of teaching and to the quality of learning separately, although all issues could be included in a combined framework.

Quality teaching

All education systems need to spell out clearly what they expect of their teachers in terms of delivering high-quality education in their classrooms. These expectations should reflect the learning philosophy that underpins the curriculum itself. They should give clear advice to a range of education stakeholders about the styles of teaching that should be employed in schools. These expectations should be based on sound research, be appropriate to the cultural environment and give confidence to the education community about the quality of education being delivered.

These expectations are commonly expressed as a 'quality teaching framework' (QTF). A QTF can be defined as a policy document that describes the characteristics of good teaching (rather than good 'teachers') in the context of a well-considered and clearly articulated philosophy of teaching and learning. As discussed in the chapter on Curriculum Development, the curriculum itself in SKN does not appear to have such an underpinning philosophy, and so it is not surprising that the characteristics of high-quality teaching required to implement the curriculum are not easily identified.

As an example, a great deal of work has been undertaken in the state of New South Wales, Australia, on developing a systematic and well-researched model for describing high-quality teaching:

> The NSW Quality Teaching model provides a framework to focus attention on, and provide consistent messages about, pedagogy in public schools. The model can be applied across all Key Learning Areas from Kindergarten to Year 12. (NSW DET, 2006)

In this model, New South Wales identified three dimensions of quality teaching that together form the structure of the framework:

- Pedagogy that is fundamentally based on promoting high levels of **intellectual quality**
- Pedagogy that is soundly based on promoting a **quality learning environment**
- Pedagogy that develops and makes explicit to students the **significance** of their work

The potential benefits of a national QTF can include:

- Providing a clear statement of expectations of and standards for teachers in a range of domains, including, for example:
  - Requirements for initial training and continuing professional development
  - Standardized teaching competencies (knowledge, skills and dispositions/attitudes) and the range of techniques and strategies teachers should demonstrate in their classrooms
  - Expectations regarding the quality of learning environments that enable high standards of learning
  - Expectations regarding contributions to school life and students' educational experience outside the classroom
  - Codes of conduct and behaviour
- Providing information to a range of education stakeholders about what is expected of teachers. In addition to teachers themselves, these stakeholders include, most importantly, parents, communities and teacher training agencies.
- Encouraging self-evaluation and peer-evaluation among teachers and helping them identify their professional development needs
- Promoting a consistent approach to classroom practice across the education system
- Guiding teacher evaluation and appraisal with a view towards achieving agreed standards

Quality learning

As noted in the chapter on Curriculum Development, it is important that all teaching and learning in SKN have a sound theoretical base. This underpinning theory will guide a range of activities across the education sector.

In particular, and as a development arising from the underpinning theory, all stakeholders should know what students are expected to know and be able to do, and should be able to recognize levels of achievement. In particular, teachers and students should have a clear framework of expectations regarding all outcomes of the curriculum in all domains.

This need in SKN would be best addressed through a quality learning framework (QLF). While there is a range of statements and policies regarding learning contained in legislation, the White Paper and other documents, what is missing is a consolidated and widely agreed-upon framework of expected learning outcomes at each stage or grade of schooling.

A QLF is an overarching statement describing the learning that is expected of students and the standards that they are expected to achieve. In developing such a framework, it is important to ensure that:

- Important principles of learning for SKN (such as inclusiveness, breadth and depth of learning, the importance of outcomes being appropriate to stages of development, the importance of lifelong learning and so on) are expressed early in the framework document and so can guide and shape components of the framework itself
- The full range of learning domains expected of students (including cognitive and intellectual development; emotional, personal and affective development; skills; and attitudes, dispositions and values) is respected in both the implementation and assessment of curriculum outcomes
- The issue of competency development (and the meaning of 'competency' itself) is addressed and explained
- As a result of the principles and domains described above, the architecture of the curriculum (meaning the prescribed subjects and cross-curriculum learning areas), including the place of TVET, is clearly defined
- Curriculum developers, teachers and examination boards are informed about the standards that students are expected to achieve. This may be achieved through guidelines or directives provided to, for example, subject panels

By developing such a framework in a collaborative way (in other words, in consultation with all relevant stakeholders), SKN will have a definitive statement about what constitutes quality learning in all SKN schools. As a result:

- Students will have a clear understanding of what they are expected to learn, why this learning is important and the standards that they are expected to achieve
- Teachers will have information that is critical to the quality of both the programmes they develop and the teaching strategies they use to promote effective learning in their classrooms
- Parents and the broader community will have a clear understanding of what is happening in schools and the outcomes that students are expected to achieve
- Teacher training institutions will be able to develop their programmes within a clear set of expectations for the work that their teacher graduates are expected to perform

POLICY RECOMMENDATIONS

RECOMMENDATION 1.1 DEVELOP A QUALITY TEACHING AND LEARNING FRAMEWORK

A QTLF can take many forms, and it is important that SKN develop a format and structure that reflect its needs, capacities and traditions. It might be appropriate to develop two frameworks, one devoted to 'quality teaching' and the other devoted to 'quality learning'. Alternatively, it might be appropriate to develop one document that contains both components and demonstrates the connections between them. Whichever model is adopted, it is important that the principles and intentions of such a framework, as outlined in the previous section, remain its primary focus.

As a first step to the development of a QLTF, a clear philosophy of teaching and learning needs to be defined. A policy statement on quality teaching and learning could be a stand-alone document, or it could be included as part of the framework and/or in the formal curriculum. The statement, along with the framework itself, should set out the beliefs, rationale and expectations about how students in SKN should be taught, what is expected of them as learners and how this approach should be supported across the system. Programme and lesson planning, as well as classroom activities themselves, subsequently need to align with this philosophy.

For example, if the formal curriculum is underpinned by a student-centred, experiential philosophy of learning, every part of the system with responsibility for curriculum implementation should be guided by that philosophy, such that:

- Teacher education programmes are based on the philosophy and teacher educators model it in their delivery
- Inspections and teacher appraisal regimes place high value on and reward teacher behaviour that is consistent with the philosophy
- Textbooks and other teaching and learning materials provide teachers with ideas and resources to implement the philosophy in their classrooms
- Assessment policy respects the philosophy and ensures that assessment practices reflect its intent

In other words, once the underpinning philosophy has been determined, elaborated and justified in the QTLF, teaching and learning practice should align with it.

Policy Issue 2: Pedagogy and learning environments

Another important policy issue in this domain is the need to promote and implement contemporary teaching strategies in classrooms and create learning environments that are engaging and stimulating.

Evidence

There are a number of factors which contribute to the development and, over time, the acceptance, of outdated teaching strategies and poor-quality learning environments. The various factors identified by the SKN review team are described below.

1. The acceptance of ineffective and outdated teaching methodologies

A major area of concern raised in the CBR is the prevalence of outdated and inappropriate teaching strategies: 'Historically, learning in SKN has been overly teacher-centred, narrowly focused on academic achievement, and de-linked from the psychosocial development needs of children' (UNESCO, 2014b, p. 87).

The limited time that the review team was able to spend in the country, particularly in terms of observing teacher behaviour in the classroom, makes it difficult to comment authoritatively on this issue. Nevertheless, consultations with stakeholders undertaken during the assessment mission for this review suggest that this is still the case. In particular the comments of parents and student teachers[15] about teaching approaches generally employed in SKN classrooms and the quality of learning

15 One student teacher told the review team that s/he felt quite intimidated during one practicum when a senior teacher counselled openly against employing what were described as 'student-centred classroom activities'. This type of reaction from older teachers was experienced by a number of student teachers consulted by the review.

environments created by teachers (teacher-dominated and consisting of rote learning and memorization) are of considerable concern.

It is most likely that the SKN teaching force, as would be expected in any system, has teachers who are familiar with and successful in using contemporary teaching strategies. Similarly, however, it is to be expected that there are a number of teachers who rely on outdated methodology, who use intimidation in their teaching and who are unable to adopt other approaches. It is a matter for further research into why this latter group exists, what proportion of teachers can be included in the group and what can be done to change their behaviour in the classroom.

While no direct evidence on these matters was presented to the review team, it seems likely that a range of factors could discourage teachers from adopting more contemporary teaching approaches. These include:

- An examination system (particularly the Test of Standards), and to some extent a curriculum, that values knowledge retention and repetition over deeper understanding and higher-order thinking
- A teacher appraisal system that does not appear to reward teachers for innovation or encourage experiential, inquiry-based and cooperative learning and competency development
- School principals and other supervisors who are focused on administration and management rather than on educational and pedagogical leadership

It is important that SKN addresses these issues at a systemic level. Responsible authorities (including teacher training institutions, the CDU and principals) should develop a range of strategies and programmes to ensure that teaching in SKN schools becomes more student-focused and that, as a consequence, the lessons become more engaging and learning becomes more enjoyable.

2. The lack of recognition of individual learning styles

The review team noted the absence of any reference to acknowledging the range of children's learning needs and styles, either in the documents provided to the review or in consultations conducted with teachers and principals. The conclusion can be drawn that a model of 'one size fits all' is a generally accepted principle of teaching in SKN.

Contemporary education systems generally encourage teaching that differentiates between students and that individualizes teaching and learning. For example, teachers are encouraged to understand and apply the VARK (Visual-Auditory-Read/Write-Kinaesthetic) model proposed as long ago as 1992 by Fleming and Mills, and

to acknowledge the importance of Howard Gardner's work on Multiple Intelligences in developing teaching programmes and individual lessons.

Similarly, most teachers do not have the skills or classroom support to effectively group students in different ways within the class depending on the content to be taught and the objectives of the lesson.

While no hard evidence was made available to the review team on these matters, it would seem the range of teaching strategies used by teachers needs to be expanded to acknowledge individual differences in their students and make learning more effective and enjoyable.

3. The apparent inequity of access and opportunity

This review is aware of the range of initiatives undertaken in the area of Special Needs Education in SKN. However, it also notes the comments and recommendations in the CBR regarding areas that require improvement (UNESCO, 2014b, pp. 97-98).

In all education systems, equity of access and opportunity for all students is an ongoing issue requiring continuous monitoring and appropriate and timely policy responses. However, this issue was not raised in any significant way during consultations with the review team. This is not to say that it is not important or that it does not require particular attention.

While this review makes no specific recommendations in this area (other than those noted under Issue 4 below), it is the view of the review team that the merits of recommendations made in the CBR should be carefully considered. In general terms, it is recommended by that all aspects of special education be monitored continuously with a view towards ensuring that all students receive the education they need and deserve, and which the system no doubt wishes to provide. In particular, attention should be given to:

- Students who experience physical disabilities
- Students with emotional and psychological conditions that might present themselves in school as anti-social behaviour, delinquency or unauthorized absenteeism
- Students with identified learning difficulties, such as general intellectual impairment, attention-deficit/hyperactivity disorder (ADHD) or dyslexia
- Students with identified gifts and talents
- Students with English-language needs, especially among the increasing cohort of Spanish-speaking students

In addition to the teacher training components integral to specific initiatives in this area, it is important that all teachers are aware of the full spectrum of student needs and are trained to teach all students in their class effectively. This issue is of particular concern in an environment where students are streamed based on ability. If students are to be grouped into high- and low-level ability groups, the teaching strategies and approaches that are needed to maximize students' potential must be available to teachers, and the needs of the 'mid-ability' groups must also not be neglected. In other words, the needs of all students of all abilities and potentials must be met.

4. The existence of teacher-student relationships which do not foster quality learning

Frequent criticisms were made during the review consultations, particularly by parents, about the nature of relationships between teachers and students. It was claimed that these relationships were too often based on power and domination by the teacher, and that students were frequently made to feel embarrassed, intimidated or even humiliated by teachers.

There is little hard evidence about the nature of teacher-student relationships in SKN. Nevertheless, if it is the view of stakeholders that these relationships are generally or too frequently negative in nature, this is a cause for concern and for action. Learning happens best when students feel secure and receive encouragement for the things they do well. The quality of learning in SKN could well be improved if teachers treated students in a more positive and encouraging way.

5. Poor physical conditions and resources

The state of some of the classrooms visited during the review consultations was a cause for considerable concern. Many of the physical spaces were poorly maintained and not at all conducive to learning. Similarly, it was repeatedly reported to the review team that teachers were forced to spend their own money to purchase consumables and to maintain their classrooms to an acceptable standard. One teacher told the review team that she felt compelled to purchase paint and paint her classroom herself, because she considered it to be an inappropriate learning space.

Providing a physical environment that encourages and stimulates learning is a fundamental responsibility of any education system. It is critical that systems are in place to provide adequate resources and appropriate facilities for high-quality teaching and learning to occur.

Discussion

Creating learning environments that are conducive to quality learning is a core responsibility of teachers and the education system as a whole. It is important to first

consider what learning environments are most conducive to learning, and then to determine how to create such environments in the SKN context.

What learning environments are conducive to high-quality learning?

There is a large amount of literature on the characteristics of learning environments that are conducive to high-quality learning. Importantly, one common finding of research and professional opinion is the belief that a combination of teacher attitudes and professional behaviour, approaches to discipline and behaviour management, and physical appearance and comfort are all important factors.

Some examples of definitions and parameters for high-quality learning environments are provided below.

According to the Department of Education and Training in Victoria, Australia (Victoria DET, 2013), the principles of high-quality learning and teaching are:

- The learning environment is supportive and productive
- The learning environment promotes independence, interdependence and self-motivation
- Students' needs, backgrounds, perspectives and interests are reflected in the learning programme
- Students are challenged and supported to develop deep levels of thinking and application
- Assessment practices are an integral part of teaching and learning
- Learning connects strongly with communities and practice beyond the classroom

According to the Teaching Community website (Thompson, n.d.), the characteristics of a well-managed twenty-first-century classroom include:

- The physical environment is invitational
- Students understand the rules and procedures they are expected to follow
- Students are actively engaged in the pursuit of knowledge
- There is a persistent tone of mutual respect
- Students take responsibility for their learning

Learning environments in SKN

In discussing the issue the learning environments in SKN, the CBR pays considerable attention to the Child-Friendly Schools (CFS) Framework that was piloted in ten primary schools in Saint Kitts and four in Nevis. It was intended that teachers in the remaining primary schools would be trained in CFS methods during 2014/15,

and that the pilot would be evaluated in 2015. It is not clear if these plans have been carried out.

Information about the CFS initiative contained in the CBR seems limited to its objectives related to behaviour management and discipline, as this was considered to be the point of entry for implementing CFS. When evaluated, it is likely that an instrument similar to that developed in East Asia and the Pacific will be used. That evaluation framework consists of indicators related to five dimensions:

1. Assessing the inclusiveness of CFS
2. Assessing the effectiveness of CFS
3. Assessing health, safety and protection in CFS
4. Assessing the gender-friendliness of CFS
5. Assessing the involvement of the student, family and community in CFS

While these dimensions place behaviour management in a somewhat broader context of what constitutes a child-friendly environment, it could also be argued that relying solely on the CFS framework as a strategy to improve teaching and classroom quality ignores the very important issue of how teachers teach.

POLICY RECOMMENDATIONS

RECOMMENDATION 2.1 ENACT MEASURES TO ENSURE THAT HIGH-QUALITY TEACHING AND LEARNING ENVIRONMENTS ARE IN PLACE IN ALL SCHOOLS, AND THAT RESOURCES ARE EQUITABLY DISTRIBUTED AND APPLIED

To implement this recommendation, it is further recommended that the MOE take, at minimum, the following actions:

1. Develop a Teacher Handbook which explains and gives examples of the types of teaching and learning expected in SKN schools based on the QTLF (see Recommendation 1.1).
2. Appoint teachers who have demonstrated their competence in applying the QTLF as in-school teacher mentors. These teachers should have as their sole focus improving the quality of teaching, consistent with the QTLF, in a school or group of schools. They should be rewarded financially for their excellence and for accepting these new mentoring responsibilities, and should have appropriate amounts of release time from face-to-face teaching.
3. Develop and implement a range of professional development courses that focus on contemporary theory and practice in teaching, and take steps to encourage

participation in such courses. These courses should include components of teaching children with learning difficulties and students with special gifts and talents.

4. Evaluate and monitor teacher preparation courses to ensure that they are consistent with the QTLF and that they apply the theory and practice of the Teacher Handbook.
5. Revise the teacher appraisal instrument to place far greater emphasis and value on the quality of teaching and on the understanding of competency in a range of teaching approaches and methodologies. This implementation strategy for the QTLF should be applied to all teachers and principals.
6. Develop a set of minimum standards for classroom facilities and appearance, and for teaching resources. This set of standards should be used to conduct an audit of all classrooms in SKN as a matter of urgency.

Policy Issue 3: Approach to ICT integration

Just as ICT has permeated most aspects of life in the twenty-first century, so has its presence come to influence and enhance most aspects of education. Most education systems around the world see integrating ICT in purposeful and relevant ways into the teaching and learning process as a high priority. According to UNESCO, ICT 'can contribute to universal access to education, equity in education, the delivery of quality learning and teaching, teachers' professional development and more efficient education management, governance and administration' (UNESCO, 2016a).

This section focuses on the current situation in SKN with regard to the integration of ICT into teaching and learning, and examines the effectiveness of current strategies and practices in the context of improving teaching methodologies and student learning outcomes. The review team identified the need for a more strategic and targeted approach to the integration of ICT into teaching and learning as a policy issue in this domain.

Evidence

The SKN CBR highlighted the following issues in ICT in education in the country:

- There is no framework to guide the integration of ICT in teaching and learning
- Software to support ICT integration has not been forthcoming
- Students were given laptops without a strong accountability or maintenance structure
- Infrastructure in schools is insufficient to accommodate use of laptops in the classroom

- Secondary-school teachers received little or no training in how to use laptops in and outside the classroom
- Only secondary-school teachers in Saint Kitts received laptops, yet demands are made of all teachers (primary and secondary) in Saint Kitts and in Nevis to use technology in the classroom

These issues are indicators of serious shortcomings in approaching ICT in education. It would appear that, for example, the distribution of laptops to students and some teachers, although well-intentioned, was done without sufficient consideration, discussion and agreement about why ICT should be integrated into teaching and learning, the expected benefits of ICT integration, or the range of programmes and strategies that should be developed and implemented to support ICT integration. The current and apparently uncoordinated approach will almost inevitably (if is has not already) lead to confusion, discontent and perceived, if not real, waste of resources.

In discussions and consultations with stakeholders in SKN conducted as part of this review, the following issues emerged that need urgent attention:

- The inconsistent availability and reliability of appropriate hardware, software and support
- The perception that current initiatives, in particular the laptop programme, have had very limited success for a range of reasons (including lack of preparation and training for both students and teachers, lack of consultation, unreliability of hardware, waste of resources, limited educational outcomes and so on)
- The ineffective integration of ICT into teaching and learning, in both the curriculum itself (as noted in the Curriculum Development chapter) and the classroom
- The lack of teacher capacity

Discussion

As technology becomes more and more embedded in our culture and our day-to-day lives, we must provide our learners with relevant and contemporary experiences that allow them to successfully engage with technology and prepare them for life after school. Incorporating ICT in education is the responsibility of all teachers, regardless of subject area specialty. It should become as natural a part of the teaching and learning process as it is of our everyday lives.

The education authority of Scotland describes the significance of ICT in education in the following way:

> We are living in a constantly evolving digital world. ICT has an impact on nearly every aspect of our lives – from working to socialising, learning to playing. The digital age has transformed the way young people communicate, network, seek help, access information and learn. We must recognise that young people are now an online population and access is through a variety of means such as computers, TV and mobile phones. (Education Scotland, n.d.)

Because it has become so important, it is critical that ICT in education be approached in a strategic and considered way. It should be placed within an overarching framework of vision, aims, objectives and anticipated outcomes – as well as the actions, priorities and resources needed to achieve them.

A strategic approach to ICT in education can take many forms, and it is critical that SKN develops an approach that reflects the country's needs, expectations and resources. Nevertheless, some examples of how other countries have approached the broad issue of ICT in education can be useful. Two such examples are provided below, from the Netherlands and Australia. Other examples from nearby regions may also be available for consideration.

ICT in education in the Netherlands

In the Netherlands, the semi-governmental organization Kennisnet promotes and fosters innovation in ICT in education. In this capacity, the organization monitors and reports regularly on the quality of ICT in education in the country's schools. Within its strategic framework for ICT, Kennisnet notes two broad areas of benefit from integrating ICT into education: improvement of the 'primary' education process (i.e. teaching and learning) and improvements in the 'secondary' education processes (such as organization, management and accountability).

The Kennisnet model is founded on a principle of 'four in balance' (Kennisnet, 2013). This model is based on the belief that a balanced and coherent use of the following four building blocks is essential in order to apply ICT for educational purposes:

1. **Vision and leadership:** 'The effective use of ICT begins with an educational institution's clear vision of teaching, the didactic use of ICT and its ambitions in these areas. Leadership is needed to make such vision and ambitions a reality.'
2. **Expertise:** 'ICT cannot be used effectively without skilled teachers and educational support or other staff. Teachers must be capable of working with ICT and, more importantly, using ICT didactically in their teaching. In this respect, a distinction can be made between three key tasks: ... pedagogical-didactic actions, working in a school-wide context, and professional development.'

3. **Content and applications** (digital learning materials): 'Skilled teachers will never be able to use ICT effectively unless they have adequate learning materials. The importance of these materials increases in proportion to a school's ambitions. The occasional use of short films on an interactive whiteboard and the use of online and digital material to supplement the curriculum are giving way to digital content and applications constituting an integral part of the curriculum. This imposes stringent requirements on the digital materials and applications used.'
4. ICT infrastructure: In regards to this pillar of the 'four in balance', Kennisnet notes the shift away from desktop computers to mobile devices, and the increased use of the internet and the cloud to promote learning (ten Brummelhuis and van Amerongen, 2010).

ICT in education in Australia

The new national curriculum of Australia integrates ICT as a general, cross-curriculum capability that is organized into five interrelated elements (ACARA, 2015b):

1. Applying social and ethical protocols and practices when using ICT
2. Investigating with ICT
3. Creating with ICT
4. Communicating with ICT
5. Managing and operating ICT

The diagram below illustrates how these elements are interrelated:

Figure 10 General ICT capabilities in the Australian curriculum

Source: ACARA, 2015b.

POLICY RECOMMENDATIONS

RECOMMENDATION 3.1 DEVELOP A COMPREHENSIVE STRATEGIC FRAMEWORK AND PLAN FOR ICT IN EDUCATION

The lack of a coordinated strategy and long-term approach to ICT in education is an urgent issue, and there is a general sense among stakeholders that an important opportunity for improving educational outcomes for students in SKN is being lost. Not only do SKN students have the right to the best in ICT in education, they need to develop contemporary ICT-related competencies if they are to keep pace with learning that is occurring elsewhere in the region and across the world.

It is critical that the MOE develops a relevant conceptual and strategic framework for ICT in education. This framework should be based on a sound set of principles (relating to, for example, quality, equity and accountability) and objectives. The MOE should then take steps to ensure that all current programmes (including the laptop programme) are consistent with that framework and that, to complement existing programmes, other initiatives are developed and implemented with a view to achieving a coherent set of outcomes in ICT education. This should, in turn, lead to the development of an action plan to be implemented as soon as possible.

Policy Issue 4: Constraints on teachers

The review cited the constraints on teachers and the impact of those constraints on the quality of the teaching process as an issue in this policy domain.

Evidence

During the assessment mission, a range of matters was raised with the review team that may be grouped under the broad heading of 'constraints on teachers and the quality of the teaching process'. Each of these matters is discussed in turn below.

While these issues may seem disparate in nature, in the opinion of the review team they all can have a direct impact on the quality of teaching and learning, and are therefore within the scope of this chapter. Some of the observations made in this section will need to be considered in conjunction with the chapter on Academic Staff.

Interruptions to contact time

A clear concern was expressed to the review team about the amount of time lost to teaching and learning because of various interruptions in school scheduling. It was acknowledged that many of these interruptions were in fact valuable and important

events (national celebrations, competitions, sports events and so on), and that they were in fact important learning experiences for students. Of concern, however, were:

- The growing number of disruptions and the cumulative effect of this rise
- The lack of planning and advance notice provided to schools about the events
- The lack of discretion provided to principals to decline involvement in the activities

The amount of time that teachers spent out of the classroom or school for various reasons was also expressed as a concern.

Administrative load on teachers

During consultations, the administrative workload on teachers was consistently raised as an issue that negatively impacts the quality of teaching and learning. It was argued that teachers are frequently required to devote time and attention, even while in school, to such tasks as providing student assessment data to the central authority and preparing for teacher appraisals.

As with other issues raised in this section, limited data and evidence were provided to the review team to validate the claims. Nevertheless, the fact that it was repeated so consistently and frequently is a cause for concern.

Gender disparity in the teaching workforce and its effect on student outcomes

In SKN, the vast majority of teachers are female: in 2013, 89.6% of primary-school teachers and 63.7% of secondary-school teachers were women (World Bank, 2016). The extent to which men are under-represented in the teaching force is an issue that, in the opinion of the review team, requires some consideration. The education system in general needs to be aware of the power of the 'hidden curriculum',[16] and the messages that are sent to students about what it means to be male and female in SKN society need to be addressed.

When the issue was raised during consultations, the view was generally expressed that this was a 'cultural issue', and a broad generalization was made that men were not attracted by the role and social status of teachers. It could be argued, however, that not seeing men in roles that involve nurturing, learning and individual development leads students to believe that only women are capable of or interested in such roles.

16 UNESCO-IBE (2013) defines the 'hidden curriculum' as the 'unofficial norms, behaviours and values that teachers teach and students learn at school, or that are directly/indirectly transferred by the school culture or ethos, and which are not necessarily a product of conscious intention'.

Disparity in training and qualifications

The quality and effectiveness of teacher preparation and ongoing training is outside the scope of this chapter. Nevertheless, the impact of having untrained or minimally trained teachers delivering the curriculum needs to be evaluated and monitored. See the chapter on Academic Staff for specific recommendations in this area.

Discussion

With regard to **loss of contact time**, this review was not able to compile and validate reliable data on this issue. However, maximizing the time devoted to the core functions of all schools – teaching and learning – is a critical system responsibility. In the light of the observations above, this issue should be carefully monitored.

The **administrative load** on teachers is a significant issue, and a range of actions will need to be taken to address the specific issues mentioned above. In regards to providing student assessment data, for example, it was not made clear to the review team why so much assessment data need to be recorded centrally. It could be argued that, for primary students, only assessments for Grade 6 really need to be stored centrally, and even this may eventually have policy implications for the existing streaming policy. In many systems, the only data that are recorded and stored centrally are those needed to validate the issuing of a national system certificate, such as a certificate for completing primary education. Other data are stored at the school level. In the absence of such a certificate, the rationale for providing data to central authorities may need to be reconsidered.

In regards to preparing for teacher appraisals, the quality and reliability of teacher appraisals is outside the scope of this chapter; however, it is possible that the time required to prepare for and undertake appraisals annually needs to be examined.

Gender disparity in the teaching force might be seen by some as a relatively minor issue. However, the education system should consider if it wants to convey inappropriate or unintentional messages about male and female roles in the school system and SKN society more generally through the 'hidden curriculum'. If this is not the case, a range of measures may need to be considered to address the gender disparity in the teaching force.

The number of **untrained teachers** in SKN schools is a significant issue that can have serious consequences for learning. These consequences include, but are not limited to:

- Inequity in educational opportunity: When teachers are not trained, the system cannot ensure all students are experiencing learning that is prepared and delivered to similar quality standards
- Loss of contact time and undue burden on supervisors: When teachers are not trained, greater degrees of responsibility are placed on supervising teachers, which results in loss of time they can devote to their own classes as well as possible frustration from being overworked
- Stigma against students: When teachers are not trained, students who are taught by untrained teachers may be disadvantaged because of community perceptions of the quality of education they have received
- Lack of respect for the teaching profession: When teachers are not trained, the general reputation and status of the teaching force and the system as a whole is lowered, which negatively impacts the community's perception of teaching as a respected profession

POLICY RECOMMENDATIONS

RECOMMENDATION 4.1 ESTABLISH A STANDING COMMITTEE TO MONITOR AND ADVISE THE MOE ABOUT INTERRUPTIONS TO INSTRUCTIONAL TIME AND THE TIME TEACHERS DEVOTE TO ADMINISTRATIVE TASKS

This committee should have a membership with representation from teachers, principals and parents. Its main function would be to gather and analyse data and to advise the MOE on changes in policy and practice required to maximize the time available for teaching and learning.

RECOMMENDATION 4.2 ANALYSE THE IMPACT OF THE GENDER COMPOSITION OF THE TEACHING FORCE ON TEACHING AND LEARNING

An analysis of why the workforce is so heavily dominated by women, and what unintended messages this might be conveying to students (as discussed above), would provide reliable information to guide future policy decisions in this area.

RECOMMENDATION 4.3 RAISE THE PERCENTAGE OF TRAINED TEACHERS IN THE WORKFORCE

While the quality of teaching (partly reflected by the number of trained teachers in the teaching force) is within the scope of this chapter, the question of how to address this issue falls more within the scope of other sections of this review – namely the chapter on Academic Staff.

Summary

The following table summarizes the policy issues and corresponding recommendations discussed in this chapter.

Table 8 Policy issues and recommendations for teaching and learning environments

Policy Domain: Teaching and Learning Environments (TL)	
Policy Issues	**Policy Recommendations**
TL 1 Quality Teaching and Learning Framework	**TL 1.1** Develop a Quality Teaching and Learning Framework.
TL 2 Pedagogy and learning environments	**TL 2.1** Enact measures to ensure that high-quality teaching and learning environments are in place in all schools, and that resources are equitably distributed and applied.
TL 3 Approach to ICT integration	**TL 3.1** Develop a comprehensive strategic framework and plan for ICT in education.
TL 4 Constraints on teachers	**TL 4.1** Establish a standing committee to monitor and advise the MOE about interruptions to instructional time and the time teachers devote to administrative tasks.
	TL 4.2 Analyse the impact of the gender composition of the teaching force on teaching and learning.
	TL 4.3 Raise the percentage of trained teachers in the workforce.

Chapter 5
Governance, planning, management, funding and M&E policies

Introduction

As the previous three chapters have thoroughly reviewed key policy issues in the respective policy domains, this chapter addresses key systemic issues which affect planning and management of the education system in SKN. As the planning and management of teachers has been discussed already in the chapter on Academic Staff, this section focuses on addressing systemic, structural and overarching issues relevant to effective service delivery within the education sector.

The education system in SKN is impressively solid if fairly outdated. It is essentially paper-based, with a lack of forward-looking resource planning and management and an almost complete absence of e-governance. Although a wide of range of educational policies are in place, there is limited policy action or implementation. The system needs to revisit aspects of governance in education, in particular leadership, accountability and delegation of authority.

Generally, the governance and management structure is highly centralized, with the MOE acting as the principal executive body for the provision of early childhood to post-secondary education. Supervision of education provision is largely the responsibility of education and curriculum officials within the MOE. Significantly, education officials in both Saint Kitts and Nevis indicate that the structure of the ministries should be reviewed and modified, as effective governance and management is hindered by organizational inefficiencies stemming from uneven distribution and lack of clarity with respect to roles and responsibilities.

Despite the fact that the 2005 Education Act authorizes a number of entities to aid the Federal Minister in administering and managing education, many are either not functioning at an optimal level or have simply not yet been established. As a result, the potential for effective distributed governance, even within the centralized structure, is not being realized (UNESCO, 2014b, p. 26).

The CBR clearly points out that a number of cross-cutting constraints have likely weakened effective governance and management throughout the system, specifically the absence of succession planning, the lack of minimum standards for leadership

roles and the absence of effective accountability systems and regulatory frameworks. Evidence of these constraints can be seen in the policy issues described in the following sections.

Policy Issue 1: Policy implementation gap

Around the world, surprisingly little attention is given to the relationship between policy models and practices, despite the huge effort devoted to developing such models. The 'rationalist' approach to policy processes, which emerged when governments began rigorously applying social science research knowledge and techniques to solve policy issues, prescribes specific steps – 'from an analysis of the policy context and the elucidation of a range of policy options to policy selection, production, implementation and evaluation' (Rizvi and Lingard, 2010). In practice, however, there is often a significant gap between policy development (the selection and production stages) and policy implementation.

The review team found this to be the case for education policy in SKN. Specifically, SKN faces a number of challenges in realizing education policies through their implementation. This section will present these challenges, as well as evidence of inefficiencies preventing the implementation of several policies. It will also offer an example of a success story from Singapore, and provide recommendations for addressing policy implementation issues.

Evidence

While the overall governance structure remains highly centralized, the 2005 Education Act does sanction a number of entities at the federal and institutional levels to aid the MOE in the administration and management of education. However, five of the seven entities are either not established or minimally functioning. This is illustrated by the following examples:

- After a one- to two-year period of relative inactivity by the Education Advisory Board, the first meeting of the new board (appointed in January 2014) was held in August 2014. The Education Advisory Board, in theory, has much opportunity to inform governance and management of education, and new members are eager to improve the functioning and relevance of the board. However, its scope of influence is solely determined by the Minister, and it has been inactive for over a year.

- The Council on Early Childhood Education, tasked with advising the Minister on the implementation of early childhood policy, has not yet been established.

- The Education Appeal Tribunal, the National Student Council and the National Council of Parent-Teacher Associations have not yet been established.

- The TVET Council and the Curriculum Development Unit are the most involved in the governance and management of education, yet both are constrained in meeting their mandates. Each cites resource constraints, inadequate staff and insufficient stakeholder participation as factors that compromise governance of their respective domains.[17] The other legally sanctioned federal bodies that could contribute to governance and management of the sector have not yet been established. This reality reinforces the highly centralized nature of education governance.

As a result, the potential for distributed governance responsibilities, even within the overarching centralized structure, is not being realized. This is an area that requires further improvement (UNESCO, 2014b, p. 26).

During the two review missions carried out in November 2014 and March 2015, the review team recognized that, although a wide of range of educational policies are in place, policy actions and implementation are often absent. Additionally the review team found that the opposite is also true: actions are taken without proper polices in place. For instance, considerable investment has been made to promote ICT integration in schools through the provision of laptops to secondary-school students and the establishment of a wireless network for all secondary schools. Despite this investment, however, the integration of ICT as a value-added teaching and learning tool has been elusive. In large part this can be attributed to the fact that the development of a framework for ICT integration did not precede the investment in and distribution of ICT resources. The MOE is now working on an ICT policy to establish the necessary framework for effective ICT integration (UNESCO, 2014b, pp. 13-14).

Finally, the review team noted that even when policy is in place and action is occurring, there is a general lack of coherence between policy and its implementation at all levels. All of these issues are characteristic of the well-known phenomenon called the 'implementation gap'.

Discussion

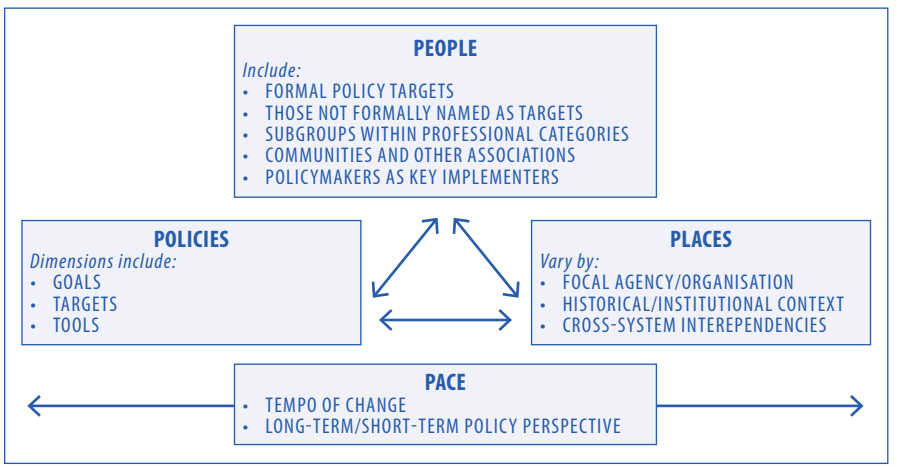
Although a wide of range of educational policies are in place in SKN, there are very few actions to implement these policies. This may be because while policy

17 For a description of TVET governance in SKN, see UNESCO, 2013c.

can be transported, implementation is highly contextual: 'The shift from the earlier input-output approach to implementation to one that is more sensitive to the way schools and school-level actors make sense of and adapt policy messages has led to increased awareness of the fact that variations in policy, people and places matter in implementation' (Sultana, 2008).

There are four key dimensions to policy implementation: the type of policy to be implemented; the pace of implementation; the places where the policy is to be implemented; and the people involved in implementation – which includes stakeholders such as non-governmental organizations (NGOs), employers, parents and local authorities; decision-makers such as managers and administrative bodies; and practitioners such as teachers, trainers and students. Different aspects of these dimensions must interact and combine to shape implementation processes and outcomes, as illustrated in the diagram below.

Figure 11 Dimensions of education policy implementation



Source: Sultana, 2008 (adapted from Honig, 2006, p. 14).

Illustrative example: Singapore

One example of effective education policy implementation comes from Singapore. Singapore is one of Asia's great success stories, having transformed itself from a developing country to a modern industrial economy in one generation. During the last decade, Singapore's education system has remained consistently at or near the top of major world education ranking systems. This can be partly attributed to the fact that when a policy is developed or revised, significant attention is given to the details

of implementation at all levels – from the MOE or the National Institute of Education (NIE) to principals and teachers in schools. The result is a remarkably faithful process of implementation with relatively little variation across schools. While different mechanisms would be needed in larger, more multilayered or decentralized systems, finding ways to bring greater alignment to the implementation process and to make all the parts work together is essential for producing results at the classroom level.

Figure 12 Illustrative example: Singapore

Success story in Singapore: ensuring coherence in the education system

According to David Hogan, Senior Research Scientist at NIE, the degree of institutional alignment in Singapore is very unusual in global terms. Singapore is a "tightly coupled" system, in which the key leaders of the Ministry, NIE and schools share responsibility and accountability. Its significant strength is that no policy is announced without a plan for building the capacity to achieve it: "By contrast, more loosely-coupled systems have a much harder time bringing about reform initiatives and are often typified by an endless parade of new, sometimes conflicting policies, without building the capacity to meet them". Consequently, practitioners become pessimistic and wait for successive reform waves to pass. In recent years, Singapore has released its tight grip and more autonomy has been given to schools to encourage more innovation (and NIE has the suitable independence for an institute in a recent research oriented university). However, there is still strong alignment among the curriculum, examinations and assessments; incentives for students to work hard; and accountability measures for teachers and principals. This makes policy-making and implementation much easier and more effective than in loosely-coupled systems, like in the United States.

(*Strong Performers and Successful Reformers in Education: Lessons from PISA for the United States*)

Source: OECD, 2011b.

POLICY RECOMMENDATIONS

In order to effectively shift from an input approach to an output-oriented approach, as well as to address existing policy implementation gaps, the following recommendations are suggested:

RECOMMENDATION 1.1 ESTABLISH A SOLID STRATEGIC FUNCTION WITHIN THE CORE PLANNING UNIT TO STEER POLICY IMPLEMENTATION

It is suggested to establish a solid strategic function within the existing core planning unit in the MOE with overall responsibility for driving and coordinating policy development and implementation. The primary goal for the core planning unit in this regard would be to set a shared strategic direction and priorities for policy

reform and implementation, through engaging a wide range of stakeholders in the provision of education as well as through mobilizing external funding and resources.

RECOMMENDATION 1.2 STRENGTHEN MECHANISMS FOR POLICY IMPLEMENTATION

A five-year strategic planning process is currently being led by the core planning unit with technical assistance from the UNESCO International Institute for Educational Planning (IIEP). As part of this process, mechanisms for policy implementation could be further strengthened by putting solid implementation arrangements in place that specify who is responsible for the overall implementation of the plan and who is responsible for specific programmes. Responsibilities and accountability need to be clearly identified through reviewing the overall structure of the MOE and the lines of authority. The existing planning unit could be in charge of assigning implementation responsibilities and overseeing the overall implementation at the policy level.

Policy Issue 2: Forward-looking human resource planning

Forward-looking human resource planning links the human resource function to the mission, goals, objectives and strategies of an organization. This section will present evidence of the absence of forward-looking human resource planning in SKN and the main issues related this absence. A success story from Mauritius about building the leadership skills of school heads will be presented, followed by set of policy recommendations for how to enhance forward-looking human resource planning in the future.

Evidence

Human resource issues can be seen throughout the education sector. At the ministry level, the CBR states that due to human resource constraints experienced by SKN and many other Small Island Developing States (SIDS) in the Caribbean, it is common within the MOE to find the phenomenon of the 'multifunctional administrator', whereby officers often fill what would be at least two distinctive job positions in more populated, better-resourced jurisdictions (Farrugia and Attard, 1989). The necessity to be multifunctional is not problematic in and of itself; however, within the context of existing organizational inefficiencies, education administrators and managers have indicated to the review team that they lack the necessary guidelines and professional support to effectively attend to multiple responsibilities. Many ministry officials report that: 1) their current job titles do not accurately reflect the duties they perform, and 2) they either never received a job description or the descriptions they received were skeletal and lacked relevance (UNESCO, 2014b).

No specific annual planning process exists at the ministry level to support the operationalization of the 2009 White Paper. According to the CBR, sector heads have been responsible for devising individual plans of action for their respective areas. The capacity of the Education Planning Division to effectively inform, guide implementation, and monitor and evaluate policy priorities is limited due to human resource and technical constraints (UNESCO, 2014b). The Curriculum Development Unit/Teacher Resource Centres (TRCs) do not have the staff needed to fulfil their mandate; research, evaluation and data-based decision-making is limited and infrequent owing to insufficient staff; and key people within the Education Planning Division would benefit from additional training to improve their technical expertise in areas under their responsibility.

A fundamental challenge for education in SKN is that strategic programme evaluation (formative and summative) is not a regular feature of monitoring and evaluation, owing to human resource and technical constraints. Furthermore, there is no formal system for evaluating the performance of ministry officials and school principals. The absence of a performance appraisal system contributes to the general lack of accountability throughout the system, as noted by a cross-section of education stakeholders.

Furthermore, education ministry officials have drawn the attention of the review team to problems in staff motivation and staff performance. Staff motivation is an important determinant of performance, and management is responsible for taking steps to strengthen it. The provision of training is currently based on supply rather than on demand or need. There is no induction training upon recruitment or entry into service, and the MOE does not map or assess staff training needs. The lack of succession planning to prepare officers for leadership roles within the MOE is also an issue that requires consideration.

Discussion

According to the CBR, human resource management in the education sector in SKN must be developed in several areas:

- Technical skills should be backed up by management capacities
- Sound coordination mechanisms between central and regional education authorities should be put in place
- Consideration should be given to the socio-political dimension of planning as reflected in the larger institutional context, including legal frameworks

The requirements for capacity development vary according to the level involved:

- **Institutional level:** It is necessary to strengthen the institutional human resources and management capacities, including policy and legislative frameworks, needed for the effective functioning of national educational institutions and organizations. Regulatory and legal frameworks should include both written and unwritten rules and regulations, as well as coordination mechanisms.

- **Organizational level:** It is necessary to strengthen the organizational capacities of educational institutions through reinforcement of the key functions and processes involved in education service delivery, such as planning and resource management, at central and decentralized levels. Essential elements in this regard include mandates, roles, responsibilities, organizational structures and internal coordination mechanisms.

- **Individual level:** It is necessary to strengthen individual capacities within the MOE by building technical know-how, skills and competencies, and by enhancing the profiles of staff, including teachers.

Forward-looking planning is crucial to addressing these issues, as it enables human resource requirements to be determined and goals, objectives and strategies to be formulated. For example, within the MOE, structures (units or sections of the institution, such as departments), functions (sets of activities) and tasks must be clearly defined and set out in the form of an organogram, or organizational chart. The relationships between these components are what link human resources and make them function as one mechanism. Further, consistency and coherence among structures, functions and tasks must be ensured. An audit would help to determine whether structures had clearly defined functions and whether functions were located appropriately within a given structure.

The human resource component is affected by the relative importance of the public sector in the education system and the role played by the MOE. When the vast majority of schools are public, the MOE usually takes full responsibility for human resource functions (teacher recruitment, projection, deployment, training, management, etc.).

The development of SMART (specific, measureable, attainable, relevant and timely) indicators is one step in the process of devising analytic tools for human resource planning and management. To develop such indicators, significant technical and political conditions must be met. Indicators fall into two categories:

1. Static indicators, consisting of the raw data relating to a particular situation at a given time (e.g. number of employees in a given category, number of job vacancies, number of replacements, training budget, hours worked, etc.).
2. Dynamic indicators, reflecting changes in parameters that are specific to human resource management (e.g. staff growth rate, staff turnover, absenteeism rate, percentage of trained staff, promotion rate, etc.).

Indicators may be also grouped by broad human resource subfunctions – such as recruitment, assignment, transfers, training and monitoring teacher utilization – in order to chart trends.

Technical criteria serve to underline the relevance of an indicator to the objectives set. One technical criterion to be considered is data availability: Are baseline data available? Another is the accuracy of the data: Are indicators derived from a simulation model? Properly defined indicators take time to develop and could entail further costs to ensure they are fully utilized and effectively managed.

Availability of data depends largely on the institutional and organizational capacities of the line ministries, including the MOE, the Central Statistics Bureau and the Ministry of Planning. Enhanced management and evaluation capacities at all levels are also needed to develop, process, analyse and update key educational indicators that can be used to measure data quality and ensure that it is adequate for results-based human resource management.

Illustrative example: Mauritius

The country of Mauritius provides an illustrative example of effective forward-looking resource planning.

St. Kitts and Nevis could benefit from the Mauritius Plan in terms of capacity-building and teacher development since both countries have similar conditions and face similar challenges. This could be an effective and efficient strategy providing that it is underpinned by sound methodology and monitored and evaluated with a view to improving it and increasing its impact on the education sector.

Figure 13 Illustrative example: Mauritius

SUCCESS STORY IN MAURITIUS

One of the most useful recommendations in the Education and Human Resources Strategy Plan 2008-2020, drawn up by Mauritius, is building leadership qualities in heads of schools. The plan is underpinned by a vision: quality education for all and a human resources development base to transform Mauritius into an intelligent nation state in the vanguard of global progress and innovation.

In order to help officials to adapt better to their posts, various workshops have been conducted to improve the capacity of staff to deliver effectively. In addition, induction programmes, conducted with the assistance of resource persons, have been provided for new recruits (teachers, deputy rectors, rectors, inspectors and quality assurance officers). Each programme covers areas relating to a specific post. Areas covered for heads of schools include: project management; providing guidance on effective teaching and learning; appraisal and evaluation of educators; team-building; time-tabling and time management; planning for resumption of studies; planning, monitoring and reviewing; evaluation and self-evaluation; staff development and distributed leadership; goal-setting for success; building a culture of community engagement; providing guidance on effective behaviour management; leadership and management; creating and communicating a vision.

In addition, the Mauritius Institute of Education (MIE), the country's sole teacher-training institute, has been providing continuous professional development to pre-primary, primary and secondary teachers.

(*Education Reforms in Action 2008-2014, Learning for Life, Ministry of Education and Human Resources,* Mauritius, September 2014)

Source: Mauritius MOEHR, 2014.

POLICY RECOMMENDATIONS

With a view towards enhancing capacities in planning and management for MOE staff, the following recommendations should be reviewed systematically and adopted, as deemed appropriate, within the education system.

RECOMMENDATION 2.1 DEVELOP A FORWARD-LOOKING AND SOUND HUMAN RESOURCE MANAGEMENT STRATEGY

A systematic and professional approach to managing human resources is crucial to the success of any education system. This can be best achieved in SKN by developing and implementing a comprehensive, forward-looking and transparent human resource management strategy in the education sector.

In order to enhance staff performance, it is recommended that the MOE expand its current performance management system to include the setting of clear goals at the beginning of each review period; the use of performance indicators with baselines and targets; regular monitoring of progress, discussion of challenges and evaluation of performance; and the mapping and matching of training demand and supply.

Improvements are also needed in the following areas, all of which underpin teacher management:

- Technical tools (e.g. information systems and forward planning)
- Social relations (e.g. staff union structures and participation procedures)
- Organization (e.g. creation of a human resource management department with major responsibilities, delegation of tasks to regional and local levels, expanded consultation and participation mechanisms)

RECOMMENDATION 2.2 DEVELOP CAPACITY TO BUILD AND USE APPROPRIATE SIMULATION MODELS FOR PLANNING

A human resource planning and management simulation model offers a simplified representation of reality and a dynamic combination of the most relevant elements needed to describe that reality.

Projection techniques and simulation models form the core of educational planning since they can be used to transform policy objectives into specific quantitative targets. Better simulation models in SKN would enable a more accurate assessment of the activities required for policy implementation and the corresponding financial input needed for human resources, including teachers. Simulation models are also necessary tools for policy dialogue and the formulation of education strategies.

RECOMMENDATION 2.3 DEVELOP MINISTRY CAPACITY IN CONDUCTING FUNCTIONAL ANALYSES (MANAGEMENT AUDITS)

Functional analyses, also known as management audits, are aimed at various types of organizational reform, including organizational analysis, reform of education ministries, review of specific educational institutions, and management of human and financial resources. Such analyses may be used to review institutional capacity and organizational behaviour within the education system. They may be used to examine the functional clarity of the ministry staff, the existing regulatory frameworks, and the current management mechanisms, including risk management and accountability.

The expected outcomes of a functional analysis may include: changes in institutional performance, adaptability and accountability; and leadership in the areas of 'vision' development, policy formulation, programme implementation, and evaluation and management within the organization.

Policy Issue 3: Education Management Information System

An EMIS is one of the main tools that can be used in education planning, monitoring and evaluation, resource allocation and policy, and planning services at the level of schools, teachers and classrooms. An EMIS requires qualified personnel, advanced technology and organized processes to achieve the best results.

SKN has devoted energy and resources to developing an EMIS to compensate for limited data capacity. The Education Planning Division of the MOE provides all schools with computers for administration and broadband internet access to make the EMIS more efficient. Data are collected annually by 31 October through questionnaires from the 24 public primary schools, 9 private primary schools, 8 public secondary schools and 3 private secondary schools. These data are tested by the Director of EMIS to verify accuracy and consistency. SKN produces a statistical bulletin annually to be used by beneficiaries (Porta et al., 2012).

There is an urgent need to modernize the current EMIS in SKN to ensure its optimum efficiency and effectiveness. The following sections discuss issues related to the EMIS in SKN, provide a comparative perspective on EMIS in the Eastern Caribbean context, and finally present several recommendations for addressing EMIS challenges.

Evidence

To clarify the different issues related to EMIS, the data life cycle will be divided into three phases: data collection (input and EMIS database), data management (analysis and statistics) and data utilization (decision-making, policy and student learning outcomes).

Data collection

According to the White Paper, a priority of the MOE is to have an efficient and fully equipped web-based EMIS system that provides timely and relevant data on various aspects of education at multiple levels (e.g. statistical, budgetary, curricular, etc.) for school and ministry use (UNESCO, 2014b). However, to date EMIS software has not been developed, so schools continue to complete annual questionnaires by hand or in Microsoft Excel and submit them in hard copy or electronically to the MOE for processing. Using these outdated tools for collecting data decreases the efficiency of

the system and provides low-quality data. However, the MOE aims to improve EMIS and provide the necessary equipment and qualified personnel.[18]

Also, due to the disaggregation, 'the current system does not adequately capture socio-economic, financial, ECE or tertiary-level data' (UNESCO, 2014b).

Furthermore, EMIS faces many challenges in SKN due to a lack of qualified staff for data collection, entry and analysis. EMIS software is not user-friendly and (currently) not available for use. The statistical information requested by external agencies is fully captured in EMIS; however, a large amount of data is unavailable, including information related to teacher retention, budgets, curriculum, the actual number of out-of-school students at the secondary level and so on. There is also a lack of instruments for the collection of data from tertiary institutions. One of the main problems is the absence of effective governance: there is a lack of accountability in terms of submitting requested data by the given deadline, and insufficient support from ministry officials in the data-collection process (UNESCO, 2014b).

Discussions held during the two review missions in November 2014 and March 2015 highlighted an urgent need to release the latest population census data from 2010, so that the core planning team would be able to further refine and update EMIS-related data. As it stands, although available data are relatively accurate, the review team has not been able to calculate more disaggregated data such as gender parity or urban-rural statistics for primary and secondary levels. This limitation is also confirmed by the latest EMIS Statistical Digest 2013-2014, released in September 2014. While the Statistical Digest facilitates the sharing of EMIS data with the public, due to the unavailability of breakdowns of the recent population data, essential indicators could not be produced.

Data management

According to the CBR, the specificity of data captured from institutions does not always allow for in-depth analysis of school or island-specific trends. For example, while student enrolment is collected by gender for each grade/form, class placement (i.e. ability stream) is not indicated, so it is not possible to analyse data on streaming/tracking over time, which could be used as an indicator when assessing educational quality and equity. Also, there is generally less data from Nevis captured in the system, and so federal data tends to be Saint Kitts-centric in some instances (UNESCO, 2014b).

18 Database software (Caribbean School Management Assistant) developed for use at the Gingerland Secondary School is currently being reviewed for its potential to be scaled up for use at all schools in SKN.

The absence of a research and statistics unit in SKN is one of the main challenges that need to be resolved. There is a need to expand the role of the Statistics and Research Unit, which is important for building an evidence-based approach to education planning.

Data utilization

According to the CBR, the EMIS is populated with data on school facilities and equipment, enrolment and attendance, and teacher qualifications and movement. Notwithstanding the gains made in better managing school- and system-level data through the use of an EMIS, the system neither captures a wide enough range of information nor is readily used for education planning, at the ministry or school level. The formulation of a sector strategy with statistical indicators and the development of a web-based EMIS, which is currently in progress, will aid in identifying useful data to be collected and improve the utility of the system at multiple levels (UNESCO, 2014b).

To date, the M&E unit in the MOE does not have a clear mandate or programme. Considerable evidence drawn from discussions with stakeholders suggests broad limitations in the quality and scope of the present M&E capacity of the ministry.

Data enable central and local authorities to have a better grasp of the situation on the ground to inform and implement targeted policies. Data can significantly alter accountability structures in education. That being said, the availability of such data does not automatically guarantee their use. Although the availability of data and the technology to gather them are important, human resources remain the key element in collecting, interpreting and analysing data, in order to ensure their optimum use. It is also important to identify the purpose of collecting data, the type of data to be collected, and the people and entities responsible for collecting and analysing data (CERI, 2015).

Discussion

Regardless of the field of study, the accuracy of data collection is essential to maintaining the integrity of policy formulation and planning. The selection of appropriate data collection instruments (existing, modified or newly developed) and their best use and analysis would certainly improve the benefits of data for users. Improper data collection prevents policy or planning questions from being answered accurately; makes it impossible to repeat and validate the study; and produces distorted findings that result in wasted resources and may compromise decisions for public policy and mislead users to follow fruitless lines of research (Northern Illinois University, 2005).

Data are useless without the skills and competencies needed to analyse and use the information, and with ever-changing technology there is an urgent need to develop new skills to translate big data into insights and business value. The main goals of having information-based decision-making in education system management are increased access, efficiency, effectiveness, equity and quality of education, through effective systems of monitoring and evaluation, budgeting and planning, and policy research and analysis.

One of the most critical factors contributing to the success of EMIS development is the existing culture of policy decision-making based on data and information. 'This culture is a user-demand-enabling environment under which the policy research and analysis capacity can be built, strengthened and further developed. Policy-makers, planners, policy analysts and other high stakeholders are the users of the data and information' (Hua and Herstein, 2003).

Comparative perspective on EMIS in the Eastern Caribbean context

In 2011 SKN was assessed using the SABER EMIS Assessment Tool (SEAT). SKN was categorized as 'Established', with a score of 0.65. Compared with the OECS average, SKN performed well on most of the SEAT Aspects of Quality except two: Methodological Soundness and Assurance of Integrity. The first score, for Methodological Soundness, was 0.67 (which is just below the OECS average of 0.69). Grenada and Saint Lucia had the same score. Assurances of Integrity was the only 'Emerging' score (0.44) of SKN that was below the OECS average (0.55).

Table 9 SEAT scores in OECS countries, 2011

	Dominica	Antigua	Grenada	St. Kitts	St. Vincent	St. Lucia	OECS Average
Pre-requisites of quality	0.70	0.52	0.68	0.66	0.45	0.64	0.61
Assurances of integrity	0.58	0.53	0.61	0.44	0.50	0.64	0.55
Methodological soundness	0.83	0.50	0.67	0.67	0.83	0.67	0.69
Accuracy and reliability	0.70	0.48	0.58	0.75	0.53	0.58	0.60
Serviceability	0.61	0.29	0.50	0.79	0.43	0.68	0.55
Accessibility	0.47	0.47	0.69	0.61	0.36	0.56	0.53
Overall	**0.65**	**0.46**	**0.62**	**0.65**	**0.52**	**0.63**	**0.59**
		Latent 0-0.3	Emerging 0.31-0.59	Established 0.6-0.79	Mature 0.8-1		

Source: Porta et al., 2012.

SEAT contains six Aspects of Quality that together present a detailed picture of the performance of SKN: (1) Prerequisites of Quality, (2) Assurances of Integrity, (3) Methodological Soundness, (4) Accuracy and Reliability, (5) Serviceability and (6) Accessibility.

1. **Prerequisites of Quality:** For the first Aspect of Quality, SKN's score (0.66) is higher than the OECS average. However, SKN needs improvement in some subcomponents. For instance, the benchmark for data-sharing and coordination among different agencies is 'Emerging' (and the score is lower than the OECS average), because agreements for data-sharing are informal among most educational levels and institutions, and absent for private universities.

Table 10 SKN SEAT scores for Prerequisites of Quality

	Prerequisites of Quality: Subcomponents	St. Kitts & Nevis	Benchmark	OECS average
0.1	Responsibility for collecting and disseminating education data is clearly specified	0.75	Established ◉◉◉○	0.75
0.2	Data sharing and coordination among different agencies are adequate	0.25	Emerging ◉◉○○	0.50
0.3	Individual/personal data are kept confidential and used for statistical purposes only	0.75	Established ◉◉◉○	0.79
0.4	Statistical reporting is ensured through legal mandate and/or measures to encourage response	0.25	Emerging ◉◉○○	0.58
0.5	Staff, facilities, computing resources, and financing are commensurate with the activities	0.50	Emerging ◉◉○○	0.63
0.6	Processes and procedures are in place to ensure that resources are used efficiently	1.00	Mature ◉◉◉◉	0.63
0.7	Education statistics meet user needs and those needs are monitored continuously	0.75	Established ◉◉◉○	0.75
0.8	Processes are in place to focus on quality	1.00	Mature ◉◉◉◉	0.63
0.9	Processes are in place to monitor the quality of data processes	0.50	Emerging ◉◉○○	0.33
0.10	Processes are in place to deal with quality considerations in planning the stat programme	0.75	Established ◉◉◉○	0.58
0.11	Mechanisms exist for addressing new and emerging data requirements	0.75	Established ◉◉◉○	0.54

Source: Porta et al., 2012.

2. **Assurance of Integrity:** This is the only Aspect of Quality in which SKN has an 'Emerging' benchmark and a score (0.44) that is well below the OECS average (0.55). This is mainly due to issues with protecting the professional independence of the data-producing institution, which leads to a lack of impartiality in basic statistics. In addition, it is difficult to find the terms and conditions of the collection, processing and dissemination of statistics – although they are available

upon request. SKN's lowest score in this Aspect of Quality is in the subcomponent for giving advance notice about changes in methodology, source data or statistical techniques.

Table 11 SKN SEAT scores for Assurances of Integrity

	Prerequisites of Quality: Subcomponents	St. Kitts & Nevis	Benchmark	OECS average
1.1	Statistics are produced on an impartial basis	0.25	Emerging ◉◉○○	0.38
1.2	Professionalism of staff is actively promoted	0.50	Emerging ◉◉○○	0.42
1.3	Choices of data sources and statistical techniques are made solely by statistical considerations	0.75	Established ◉◉◉○	0.83
1.4	Agency is entitled to comment on erroneous interpretation and misuse of statistics	0.50	Emerging ◉◉○○	0.58
1.5	Terms and conditions are available to the public	0.25	Emerging ◉◉○○	0.33
1.6	Public is aware of internal governmental access to statistics prior to their release	0.50	Emerging ◉◉○○	0.38
1.7	Products of education statistical agency are clearly identified	0.25	Emerging ◉◉○○	0.50
1.8	Advanced notice is given of major changes in methodology, source date, and statistical techniques	0.00	Latent ○○○○	0.71
1.9	Guidelines for staff behaviour are in place and are well known to the staff	1.00	Mature ◉◉◉◉	0.83

Source: Porta et al., 2012.

3. **Methodological Soundness:** SKN's score (0.67) in this Aspect of Quality is below the OECS average (0.69) but still reaches the 'Established' benchmark. SKN earned one 'Mature' benchmark on this Aspect of Quality, due to its use of internationally accepted standards and guidelines for structure, concepts and definitions established by UIS and the OECS Education Reform Unit (OERU). Currently, the country's EMIS produces around 69% of the UIS indicators annually, which resulted in an 'Emerging' benchmark in the subcomponent for statistics (Porta et al., 2012).

Table 12 SKN SEAT scores for Methodological Soundness

	Methodological Soundness: Subcomponents	St. Kitts & Nevis	Benchmark	OECS average
2.1	Overall structure, concepts and definitions follow regionally and internationally accepted standards, guidelines, and good practices	1.00	Mature ◉◉◉◉	0.83
2.2	Scope is in accordance with international standards, guidelines, or good practices	0.25	Emerging ◉◉○○	0.42
2.3	Classification systems are consistent with international standards, guidelines, or good practices	0.75	Established ◉◉◉○	0.83

Source: Porta et al., 2012.

4. **Accuracy and Reliability:** SKN's score for this Aspect of Quality is the highest of the OECS countries (0.75). It received 'Mature' benchmarks for four out of ten subcomponents, as shown in the table below.

Table 13 SKN SEAT scores for Accuracy and Reliability

	Accuracy and Reliability: Subcomponents	St. Kitts & Nevis	Benchmark	OECS average
3.1	Source data are obtained from comprehensive data collection that takes into account country specific conditions	0.50	Emerging ◉◉○○	0.58
3.2	Data are reasonable confined to the definitions, scope, classifications, and time of recording required	0.50	Emerging ◉◉○○	0.50
3.3	Source data are timely (6 months after event)	0.75	Established ◉◉◉○	0.46
3.4	Other data sources, such as censuses, surveys, and administrative records, are routinely assessed	0.50	Emerging ◉◉○○	0.42
3.5	Data compilation employs sound statistical techniques to deal with data sources	1.00	Mature ◉◉◉◉	0.79
3.6	Other statistical procedures (data editing, transformations, and analysis) employ sound statistical techniques	0.75	Established ◉◉◉○	0.63
3.7	Intermediate results are validated against other information where applicable	0.50	Emerging ◉◉○○	0.67
3.8	Statistical discrepancies in intermediate data are assessed and investigated	1.00	Mature ◉◉◉◉	0.92
3.9	Statistical discrepancies and other potential indicators or problems in statistical outputs are investigated	1.00	Mature ◉◉◉◉	0.71
3.10	Studies and analyses of revisions are carried out routnely and used internally to inform the processes	1.00	Mature ◉◉◉◉	0.33

Source: Porta et al., 2012.

5. **Serviceability:** The serviceability of SKN's EMIS data rates as 'Established' (0.79) and is well above the OECS average (0.55). No subcomponent is scored below 0.50, which shows that there is a strong foundation for Serviceability in SKN. One of the weakest subcomponents is 'Timeliness follows international dissemination standards'. Generally speaking, administrative census data should be released within two months of the start of the school year, but in SKN they are available six to twelve months after that time.

Table 14 SKN SEAT scores for Serviceability

	Serviceability: Subcomponents	St. Kitts & Nevis	Benchmark	OECS average
4.1	Periodicity follows dissemination standards	1.00	Mature ◉◉◉◉	0.96
4.2	Timeliness follows international dissemination standards	0.50	Emerging ◉◉○○	0.63

	Serviceability: Subcomponents	St. Kitts & Nevis	Benchmark	OECS average
4.3	Statistics are consistent within the dataset	0.75	Established ◉◉◉○	0.71
4.4	Statistics are consistent or reconcilable over a reasonable period of time	0.75	Established ◉◉◉○	0.54
4.5	Statistics are consistent or reconciliable with those obtained through other data sources and/or statistica frameworks	1.00	Mature ◉◉◉◉	0.33
4.6	Revisions follow a regular and transparent schedule	0.50	Emerging ◉◉○○	0.21
4.7	Preliminary and/or revised data are clearly identified	1.00	Mature ◉◉◉◉	0.46

Source: Porta et al., 2012.

6. **Accessibility:** SKN received the second-highest score among OECS countries for Accessibility (0.61). One of the problems in this Aspect of Quality is that data are not released according to a pre-announced schedule, and the yearbooks and metadata are only available upon request. In addition, the subcomponent 'Contact points for each subject field are publicized' has a score below the OECS average, which points to a need for improvement.

Table 15 SKN SEAT scores for Accessibility

	Accuracy and Reliability: Subcomponents	St. Kitts & Nevis	Benchmark	OECS average
5.1	Statistics are presented to facilitate proper interpretation and comparisons (layout, clarity of texts, tables, and charts)	1.00	Mature ◉◉◉◉	0.96
5.2	Dissemination media and format are adequate	0.75	Established ◉◉◉○	0.54
5.3	Statistics are released on a pre-announced schedule	0.25	Emerging ◉◉○○	0.38
5.4	Statistics are made available to all users at the same time	1.00	Mature ◉◉◉◉	0.79
5.5	Statistics not routinely disseminated are made available upon request	0.50	Emerging ◉◉○○	0.75
5.6	Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and diferences from internationally accepted standards, guidelines, or good practices are annotated	0.75	Established ◉◉◉○	0.58
5.7	Levels of detail are adapted to the needs of the intended users	1.00	Mature ◉◉◉◉	0.38
5.8	Contact points for each subject field are publicized	0.25	Emerging ◉◉○○	0.38
5.9	Catalogues of publications and other services, including information on any charges, are widely available	0.00	Latent ○○○○	0.00

Source: Porta et al., 2012.

POLICY RECOMMENDATIONS

This section presents recommendations for addressing the main challenges and problems facing SKN in the field of EMIS and data capacity. These recommendations are also included in the CBR. The recommendations can be grouped according to the three main criteria necessary to ensure best use of EMIS: access and equity, efficiency and effectiveness, and quality.

Access and equity

RECOMMENDATION 3.1 WIDEN THE SCOPE OF EDUCATION DATA COLLECTION

There is a need to widen the scope of education data collected in terms of access, participation, funding and quality. It is also important to raise awareness of data systems and their capabilities and availability. One of the important roles of key national players is to encourage the use of linkable or compatible systems – to prevent difficulties with the input or transfer of data – and to share good practices through networks or clusters of schools, workshops and other strategies.

RECOMMENDATION 3.2 DISSEMINATE AND DEPLOY CAPACITY-BUILDING AND TRAINING

The dissemination of capacity-building and the promotion of training and support in the use of data are necessary to raise awareness about the importance of EMIS for education development. This should consist not only of software training but also of training in how to use and share data analysis outcomes.

Efficiency and effectiveness

RECOMMENDATION 3.3 IDENTIFY AND FILL EXISTING GAPS

First, the current system should be revised to identify gaps and any lack of effectiveness, and then best practices can be created and piloted for the EMIS database to develop the system further.

RECOMMENDATION 3.4 DEVELOP A STRATEGIC PLAN

Developing a strategic and results-oriented approach to education planning, monitoring and evaluation will increase the effectiveness of the system. It is important to standardize measures of school effectiveness. As stated previously, staff should be qualified and meet minimum requirements. The demands on schools (workforce

reform) therefore need to be reviewed to ensure staff have sufficient time and skills to analyse data at a meaningful level.

RECOMMENDATION 3.5 ESTABLISH AN M&E SYSTEM

As monitoring and evaluation are the main applications of the use of data, it is important to strengthen the M&E function by establishing a system that covers all of the ministry's operations. In addition, it may be necessary to expand the mandate and functions of the current M&E system to strategically position this function within the structure. It will also be necessary to add an adequate number of M&E specialist positions to reinforce existing work and to assist in the work of the planning unit.

Quality

RECOMMENDATION 3.6 ESTABLISH A WEB-BASED EMIS AND ENHANCE THE ROLE OF THE STATISTICS AND RESEARCH UNIT

To improve data quality, a web-based EMIS needs to be established to improve record-keeping, data management and evidence-based decision-making at the ministry and school levels.

The role of the Statistics and Research Unit should also be enhanced in order for it to fulfil its key function as a decision-maker in the country. As stated in the White Paper, the current role of the unit is to 'contribute to the development of the Ministry's Research Agenda, formulate information policy for the MOE, conduct tracer studies for various categories of students, and conduct training needs assessment surveys, workplace and employer surveys and Labour Force surveys' (MOE, 2009, p. 149).

RECOMMENDATION 3.7 IMPROVE THE PREREQUISITES OF QUALITY

The prerequisites of quality (as defined by SEAT) could be improved by formalizing informal agreements, establishing a formal legal framework for EMIS and hiring and training additional EMIS staff (Porta et al., 2012). SKN could collect data on school characteristics and education demand. It is also important to develop procedures to update, standardize and properly reference source data, as well as document information on sampling errors and inputted data. It is vital to validate intermediate results against other information. Finally, it is essential to ensure that education data are given to other source providers within six months of the end of the school year.

Policy Issue 4: Efficiency and effectiveness

According to UNESCO's definition, effectiveness in the education system is 'the extent to which the set goals or objectives of a school programme are accomplished. Such effectiveness can be seen in relation to either the quality, quantity, equity or equality of educational instruction given in a school' (Commonwealth Secretariat, 1993). Educational efficiency is 'the extent to which the inputs produce the expected output in a school setting. Increased efficiency means achieving the same or better outputs with fewer or the same inputs.'

Effectiveness and efficiency are significant determining factors in the quality of an education system. There is evidence that more resources do not mean better results in terms of education quality and learning outcomes. More important is the allocation and use of existing resources in the best way at different levels of the education system. The education sector needs to save resources internally by tackling various types of inefficiency before increasing resources to the sector (UNESCO, 2016b).

This section is dedicated to different perspectives on the issue of effectiveness and efficiency in the education sector. In the sections that follow, evidence is presented from the CBR and the missions for the need to improve the effectiveness and efficiency of the education system in SKN. Success stories from other countries are shared to extract lessons learned, and recommendations are offered to address this policy issue.

Evidence

This section breaks down issues of effectiveness and efficiency in the SKN education system into three categories: monitoring and evaluation, schools, and financial resources.

Effectiveness and efficiency of the monitoring and evaluation process

According to the CBR, the effectiveness of national examinations in accurately assessing student learning is currently being debated, due to concerns about curriculum, testing and measurement constraints (UNESCO, 2014b). Also, there is no assessment mechanism in place for students who cannot perform at levels required by the CXC at the secondary level. Furthermore, assessment methods need to be expanded beyond paper-and-pencil tests to improve effectiveness and accuracy, as well as offer a more holistic approach to student evaluation.

Despite the fact that a school review is carried out in public and assisted private institutions biennially (every other year) at the primary and secondary levels,[19] no specific standards or indicators have been established to check the evaluation or the use of evaluation results. There is therefore a need to standardize the process by which school effectiveness is evaluated. The CBR also pointed that the national examination and assessment system can be best described as 'monomodal', as both the Test of Standards (primary-level) and the CSEC (secondary-level) are summative paper-and-pencil tests. 'Significantly, the appropriateness of both exams has been questioned and criticized. The former is said to be testing standards when there are no established standards while the latter is seen as an examination without clear purpose' (UNESCO, 2014b). At the primary level, there is also concern that the Test of Standards does not receive as much attention as the CSEC. At the secondary level, 'there is consensus that using performance on CSEC examinations as the sole determinant of success is insufficient, as it neither caters for all secondary-school leavers nor is a good indicator of performance in the world of work'.

Another issue SKN faces in terms of M&E is that appraisals are not effectively used in determining career promotion, pay rises or disciplinary actions. According to the CBR, 'the link between teacher appraisal and professional development is underdeveloped, as appraisals are not used to systematically track teachers' strengths and weaknesses. Significantly, the draft policy reiterates the intended uses of the evaluation and provides a framework for instituting a Performance Improvement Plan for teachers deemed ineffective' (UNESCO, 2014b).

Effectiveness and efficiency of schools

According to the CBR, efforts are underway to devise a standard approach to assessing effectiveness in primary and secondary schools. Such an approach is 'much needed and will help to strengthen monitoring and evaluation at the institutional level' (UNESCO, 2014b).

In terms of out-of-school children, 37% of boys and 23% of girls do not make it to Form 5. This reality, to quote the 2013 Education Sector Situation Analysis: 'calls into question the internal efficiency, quality, and relevance of the system [and] … points to the need to enhance efforts to retain more students in secondary school as, arguably, the students who do not survive are more likely be become disaffected and negatively engaged'(Government of St Kitts and Nevis, 2013, pp. 18-19). Education and community stakeholders mentioned that, in most cases, these students leave

19 In Saint Kitts, the process is called a School Performance Review. In Nevis, it is called the Whole School Review.

school without the necessary skills (academic/technical, technological, social and employment skills) for the world beyond secondary school.

The impact of streaming on learning outcomes and retention in SKN has not been investigated. However, data on secondary-school enrolment and school leavers suggest that streaming in schools is a risk factor that challenges success and equity and possibly contributes to school drop-out and student disengagement.

As early as the 1980s, Crespo and Michelena (1981) reported a consistent negative relationship between students being placed into lower streams and their cutting class or being absent from school, noting that dropping out is sometimes an end result of streaming. In reporting on their findings, these authors noted that students with high rates of absenteeism were over-represented in low streams, and that the relationship found between streaming, absenteeism and dropping out of school remained constant even after controlling for a number of other variables to include student 'ability' and academic performance. As discussed in the CBR, streaming can be a barrier to equity and inclusiveness in education (UNESCO, 2014b).

Streaming of students exists in all public secondary schools and some primary schools in SKN. According to the CBR, 'in small schools (i.e. one class per grade) students learn and work in a mixed ability setting. However, larger primary schools often used multi-class grade settings as an opportunity to stream. Some schools have developed the practice of streaming in the infant department (grades K–2)' (UNESCO, 2014b). This practice fails to take into account the variability of student's performance, particularly at the kindergarten level, when performance is indicative of school readiness and not innate intelligence or ability. One major and pervasive consequence of early streaming is that many students with low school readiness often internalize from a very young age that they are not 'bright' and that school is not fun. This has major implications for future learning. Most troubling is that among the low-performing students who are streamed into lower-level classes, only a very small percentage every move up into a higher-level stream. While students' placements are supposed to be re-evaluated on a termly basis, there tends to be limited upward mobility in streams.

In general, what makes a school more efficient and effective at offering quality education is small class sizes and trained teachers at all levels. According to the CBR, the education system in SKN has small class sizes (the pupil–teacher ratio is 14:1 at the primary level and 8:1 at the secondary level[20]) and a growing number of trained teachers in the system. Yet in spite of this, student performance on common

20 This includes both public and private primary and secondary schools in the country.

assessments points to compromised quality throughout compulsory education (UNESCO, 2014b, p. 9). A significant improvement in the quality of education provision is required to improve student outcomes.

Regarding ICT equipment, computer labs were implemented in primary and secondary schools starting in 1998 (Anius, 2011). However, the computers are now outdated, maintenance is not adequate, and many do not allow access to recent programmes and ICT applications.

Effectiveness and efficiency of financial resources

Provision of education in SKN is essentially financed by the national budget of the government allocated to the education sector. Public expenditure on education was 4.2% of the GDP in 2007 and estimated at 4.63% in 2009 (World Bank, 2016; Rossel-Cambier and Romagnoli, 2009). According to the CBR, 'with the lion's share of recurrent expenditure spent on compensation of employees and a limited amount of monies available for capital projects, there is often not enough funding available for education development initiatives. Foreign aid is secured for capital projects as well as new and recurrent educational programming.[21] Moving forward, there is a need to collect better data on actual expenditures by sector and to ensure that budgets and financial forecasts reflect funding needs for sector priorities' (UNESCO, 2014b).

According to the literature review conducted for this review, data remain insufficient to enable a full analysis of the education sector in SKN. For example, data on government public expenditure per student have not been available since 2003 for both primary and secondary education.

Discussion

There are myriad ways to improve effectiveness and efficiency at various levels of the education system. The following success story from Lebanon, for instance, illustrates how developing ICT infrastructure in schools can lead to improvements in teacher effectiveness.

Although it is widely acknowledged that an improved pupil–teacher ratio would lead to higher-quality education, beyond a certain threshold this strategy becomes less cost-effective. Examples of high-performing systems observed in Korea, Finland, Japan and Canada (the top ten in OECD/PISA in 2009) indicate that a low pupil–teacher ratio will not automatically translate into better performance in student learning achievements and outcomes.

21 All foreign aid to the education sector is managed by the MOE, even for education projects in Nevis.

Consequently, revisiting the current pupil–teacher ratio is the first necessary step to be undertaken, particularly in view of (1) overall stagnating demographical trends; (2) a systematic projection of future supply and demand of teachers; and (3) improving eventual efficiency of the system, which is the overall objective set out as the strategic priority in the reform process.

Figure 14 Illustrative example: Lebanon

Empowering teacher effectiveness – schools in Lebanon

Technology has the ability to transform the learning experience of young people. Makassed Khalil Shehab Primary School proves that well-planned professional development programmes are critical and support teachers to become more effective in their positions.

The aim of Makassed Khalil Shehab Primary was to transform teaching practice to ensure pupils received a more rewarding and relevant education by improving teacher effectiveness and making learning more meaningful and interactive. It also aimed to enable teachers to utilize technology more effectively in order to foster the development of critical and higher-order thinking skills amongst pupils.

Over the last six years, the school has taken substantial steps to develop its ICT infrastructure and to harness technology to enhance administration and teaching/learning practices. After strategic decisions were taken to increase teacher effectiveness and to fully implant technology within the classroom, a rich and varied set of both association-wide and school-specific professional development and ongoing training programmes were put in place to ensure staff understood broader educational foundations and principles so that technology would be more effectively applied in the classroom. As mentioned in the case study: "Staff were given basic and advanced training with a clear focus on developing key skills amongst learners. For example, they prepared flipcharts to use on the interactive whiteboard as part of their training, focusing on the type of skills and learning styles that the resources were addressing. As enthusiasm grew, they started uploading lessons to Promethean Planet and began incorporating a range of other software, hardware and other 'add ons' to enhance their practice. Staff now feel technology is an embedded and integral part of their wider teaching methodology and pedagogy" (Promethean Education Strategy Group: Teacher Effectiveness, Empowering Teacher Effectiveness - Two schools in Lebanon share their stories).

Source: Promethean Education Strategy Group, n.d.

As another example, the Mauritian Government's Education and Human Resources Strategy Plan 2008–2020 has been developed specifically with effectiveness and efficiency in mind:

Figure 15 Illustrative example: Mauritius

Education and Human Resources Strategy Plan 2008-2020

Republic of Mauritius

This education and Human Resources Strategy Plan (EHRSP) has as its mission:

1) "To develop a culture of achievement and excellence by promoting an efficient and effective education and training system that is inclusive and integrated, comprehensive and holistic;
2) To foster innovation and to generate new knowledge for the socio-economic and sustainable development of the nation;
3) To ensure learning opportunities accessible to all, provide learners with values and skills to further their personal growth, enhance their critical and exploratory thinking and encourage them to innovate and to adapt to changes in an increasingly globalized environment"

One of their main targets is school staff development and facilitation of professional development to enhance efficiency. Their strategic goals are to:

1. Offer a wide range of responsive, flexible, high-quality and challenging teacher education programmes, in line with international norms and standards
2. Give a greater thrust to special education needs
3. Ensure transferability, sustainability of training undertaken by teachers and recognition and dissemination of good practices through the creation of a community of practice at school level
4. Strengthen partnerships with all stakeholders in education for effective support of teaching and learning in schools
5. Ensure accountability of school leaders
6. Review entry qualifications and modes of selection for all cadres in education and increase opportunity for continuous professional development in the sector
7. Further strengthen and develop Distance Education
8. Develop a comprehensive HR Strategy for training in the sector
9. Further invest in Strategic and Action Research in education
10. Strengthen MIE as an Institution of excellence in Teacher Education, Research and Curriculum Development.

(*Republic of Mauritius, Ministry of Education, Culture and Human Resources, Education and Human resources Strategy Plan 2008-2020*, October 2009)

Source: MOEHR, 2014.

The experience of Mauritius is one of the success stories that St. Kitts and Nevis can use as a source for recommendations and lessons learned (to be applied in its own education system).

POLICY RECOMMENDATIONS

The following recommendations are based on information contained in the CBR as well as success stories from other countries. They are intended to ensure the effectiveness and efficiency of the education system in SKN. As with the issues, the recommendations will be presented under three main headings: monitoring and evaluation, schools, and financial resources.

Effectiveness and efficiency of the monitoring and evaluation process

RECOMMENDATION 4.1 STANDARDIZE THE PROCESS BY WHICH SCHOOL EFFECTIVENESS IS EVALUATED

There is a need to define specific standards and indicators to guide evaluation and the use of evaluation results. These should have a clear purpose and guidelines, in order to establish an effective and efficient monitoring and evaluation process.

Effectiveness and efficiency of schools

RECOMMENDATION 4.2 RUN COMPREHENSIVE COHORT ANALYSES FOR BOTH PRIMARY AND SECONDARY EDUCATION

It is essential to conduct a comprehensive analysis of primary and secondary education based on thorough cohort analyses. First of all, a study should be made of the context of education sector development. Then a detailed analysis should be carried out of enrolment, internal efficiency and out-of-school children. A study of financial and cost issues must be carried out before studying the quality, system capacity and management of primary and secondary education. External efficiency and equity should be studied to identify the needs of the market, its structure and the economic return of different education levels. It is important to carry out studies with a view towards ensuring a successful transition from primary to secondary education (UNESCO et al., 2014).

RECOMMENDATION 4.3 PRODUCE A YEARLY SCHOOL IMPROVEMENT PLAN

It is essential to first create a standard approach to evaluating effectiveness in primary and secondary schools, in order to strengthen monitoring and evaluation at the institutional level. After that, yearly improvement plans should be produced with a detailed list of needs and gaps that the plan has to address in order of urgency.

RECOMMENDATION 4.4 DEVELOP A DEDICATED STRATEGY TO COPE WITH OUT-OF-SCHOOL CHILDREN

According to the 2010 EFA Global Monitoring Report (UNESCO, 2010), there are three sets of policies that can help tackle the problem of out-of-school children. These policies are aimed at improving access and affordability, improving the learning environment, and ensuring basic entitlements and opportunities for the poor and marginalized groups.

To improve accessibility and affordability, it is vital to reduce direct and indirect costs, provide targeted financial incentives, finance school infrastructure, offer schooling close to children's homes, support flexible education provision, and coordinate and monitor non-state provision.

To improve the learning environment, it is important to achieve equity in the teaching workforce, recruit teachers from marginalized groups, provide additional support to disadvantaged schools, develop a relevant curriculum, and facilitate intercultural and bilingual education.

To guarantee basic entitlements and opportunities for the poor and marginalized group, there is a need to develop a poverty-reduction strategy that addresses early childhood deprivation, enforces anti-discriminatory legislation, provides social protection and allocates public spending more equitably.

RECOMMENDATION 4.5 CARRY OUT A FEASIBILITY STUDY ON STREAMING PRACTICES TO IDENTIFY ASSETS AND DRAWBACKS IN THIS POLICY

A feasibility study (FS) is very important for evaluating the technical, commercial and economic basis of any project and determining whether the opportunity brings benefits. An FS on streaming at the primary level would help to identify the pros and cons of this policy. Studies may range from early scoping and concept analysis through to a pre-feasibility study (PFS) comparing multiple options, leading eventually to a full FS where the best option identified in the PFS is refined and clarified.

It should be noted that this issue also falls under the policy domain of teaching and learning environments. Therefore policy recommendations from both domains need to be looked at in parallel.

Effectiveness and efficiency of financial resources

RECOMMENDATION 4.6 IDENTIFY POTENTIAL WASTAGE IN THE SYSTEM THROUGH A PUBLIC EXPENDITURE TRACKING SURVEY (PETS)

The public expenditure tracking survey is 'a method used to study the flow of public funds and other resources, including various levels of government and administrative hierarchy' (Reinikka and Smith, 2004). The method has achieved successful results in Peru, Uganda and many other countries as a means of improving understanding of how public resources devoted to education often produce unsatisfactory outcomes.

At the outset, external consultants or employees of a government statistical office are chosen to form a research team to hold broad-based consultations. This team identifies issues and problems affecting the education sector. After collecting the data, the research team analyses them and answers the research questions posed during the consultations.

The total cost of this study depends on the country and the scope of work, and may range from US$50,000 to well over US$100,000.

PETS results from many countries include: estimates of leakage; information on the percentage of funds are spent at each level of the education hierarchy; a description of how funding is targeted among different schools and subpopulations; and information about school facilities, teacher quality, absenteeism, drop-out rates, test scores, school governance and accountability.

Policy Issue 5: Leadership and accountability

Governance is a new concept used by education partners worldwide. Governance involves organization of the education system, power- and resource-allocation, decision-making structures and processes, mandates, stakeholder roles and responsibilities, and the relationship between central and local authorities. The main objective of governance is to improve teaching and learning and make education more effective and efficient (Watson et al., 2003).

Sound governance within the education system requires leadership and accountability to ensure that stakeholders perform well. Kaufmann (2005) defines governance as 'the traditions and institutions by which authority in a country is exercised for the common good', which include the process of selecting those in authority, the government's management capacity, and respect for the state (Lewis and Pettersson, 2009).

This section will focus on ineffective governance in the education sector owing to the absence of accountability and leadership. A series of recommendations, based on success stories in other countries, will be made with a view towards improving education governance in SKN.

Evidence

Despite the country's extensive range of educational policies, there is little policy action or implementation. A review of education governance, in particular leadership and accountability, is urgently needed. The education system must ensure greater equity and efficiency in the provision of services.

According to the literature review, the lack of administrative and instructional leadership skills in education poses a challenge for governance. At the institutional level, schools and training institutions are governed by a principal or head. In public schools, the principal is assisted by a management team, and, in private schools, by a board of governors or advisors. Such bodies do not, however, fulfil their mission effectively owing to the absence of standards or qualifications for the selection of their members. The qualifications of individuals in leadership roles vary greatly and affect the quality of service delivery. Many principals and school management teams lack the leadership skills needed to ensure effective teaching and learning and a sound institutional culture. Furthermore, some institutions do not have an elected Parent–Teacher Association (PTA) executive, and the contributions of functioning PTAs and student councils tend to be largely tied to school improvement and fundraising activities rather than to substantive decision-making at the institutional level. In addition, the hiring process lacks transparency and compliance with existing recruitment procedures is low.

The question of lack of accountability also arose during the two missions conducted by the review team in SKN. A system based on accountability must ensure compliance with regulations and adherence to professional standards, and be driven by results. In the view of ministry officials, in order to remove the obstacles to effective governance and management, the organizational structure of the education system should be reviewed and modified with a view towards clarifying and improving the distribution of roles, responsibilities and accountability. Initial efforts in this regard should be continued and strengthened.

According to the CBR, the lack of minimum standards for leadership roles has impacted the quality of service delivery; accountability systems and regulatory frameworks are underutilized, and in some instances not developed; and technical and professional support systems for supervisors are inadequate (UNESCO, 2014b).

Discussion

Cooperation between government and citizens may be seen as an integrated long-term strategy for good governance. 'Rule of law, accountability and transparency are technical and legal issues at some levels, but also interactive to produce government that is legitimate, effective and widely supported by citizens, as well as a civil society that is strong, open and capable of playing a positive role in politics and government' (Johnston, n.d.).

The following example from the Netherlands illustrates how clearly delineating responsibilities and roles within and across the education sector helps contribute to good governance and the overall functioning of the system.

Figure 16 Illustrative example: The Netherlands

SUCCESS STORY IN THE NETHERLANDS

The Netherlands is one of the leaders in education. Its governance structure consists of a centralized policy implemented by school boards with a high degree of school autonomy.

In the Netherlands, the Ministry of Education, Culture and Science is responsible for the quality of the education system. It sets national education policy for early childhood education and care and for primary and secondary education, including standards, examinations and funding mechanisms. Other bodies also shape education policy:

- The Education Inspectorate reviews and monitors the quality of educational institutions;
- Statistics Netherlands (Central Bureau of Statistics) collects and processes data on education and on transition to the labour market;
- The Dutch Education Council is an independent advisory body of leading academics, administrators and other experts on education. Other stakeholders include unions representing teachers and school leaders, umbrella organizations of school boards, and the Education Co-operative, which includes the five leading teachers' organizations and is pledged to support the quality of the teaching profession.

(*Education Policy Outlook: Netherlands*, OECD, October 2014.)

Source: OECD, 2014.

This example of how various institutions in the education sector cooperate to fulfil various tasks and responsibilities could be used by St. Kitts and Nevis with a view to improving the effectiveness of its education governance.

POLICY RECOMMENDATIONS

RECOMMENDATION 5.1 DEFINE THE SPECIFIC FUNCTIONS OF THE MINISTRY OF EDUCATION

The core functions and roles within the MOE – for example, the responsibilities of a policy analyst or education planner – should be identified and revised with a view towards increasing effectiveness and avoiding duplication of effort. Useful lessons might be drawn from the functional analysis being conducted by the World Bank to improve the ministry's organizational structure and ensure effective organizational functioning at all levels.

RECOMMENDATION 5.2 ESTABLISH A POLICY COORDINATION PLATFORM TO ENHANCE INTRA- AND INTER-MINISTERIAL COORDINATION

The current challenges include lack of coherent policy direction and effective coordination mechanisms, which hinder effective governance. Intra- and inter-ministerial communication must be developed and an education advisory board set up to guarantee the integration and coordination of various institutes across sectors, and to ensure an institutionalized mechanism for dialogue.

RECOMMENDATION 5.3 STRENGTHEN AND ENSURE ADHERENCE TO EXISTING REGULATORY FRAMEWORKS AND DEVELOP ACCOUNTABILITY MEASURES WHERE NEEDED

To achieve effective governance, the MOE must strengthen its culture of accountability by communicating its objectives and the expected standards more clearly to staff. To further enhance results-driven accountability, ministry-level objectives must be articulated more precisely and translated into functional targets with a view towards defining clearer roles and responsibilities at various levels of the ministry's operations.

RECOMMENDATION 5.4 INCREASE MEANINGFUL PARTICIPATION OF SCHOOL LEADERS IN GOVERNANCE AND MANAGEMENT DECISION-MAKING PROCESSES THAT CONCERN SCHOOLS

Mechanisms to strengthen stakeholder participation must be introduced at various levels of the MOE's operations, with the specific goal of improving accountability. Better communication of ministry objectives to staff and stakeholders together with effective stakeholder engagement will serve to strengthen accountability.

RECOMMENDATION 5.5 IMPROVE TECHNICAL SUPPORT AND PROFESSIONAL DEVELOPMENT FOR SUPERVISORS AND MANAGERS

Providing technical support and professional development for supervisors and managers will help improve their qualifications and relevance and provide them with an opportunity to apply for higher managerial positions.

Summary

The following table summarizes the policy issues and corresponding recommendations discussed in this chapter.

Table 16 Policy issues and recommendations for governance, planning, management, funding and M&E policies

Policy Doman: Governance, Planning, Management, Funding, and M&E Policies (GP)			
Policy Issues		Policy Recommendations	
GP 1	Policy implementation gap	**GP 1.1**	Establish a solid strategic function within the core planning unit to steer policy implementation.
		GP 1.2	Strengthen mechanisms for policy implementation.
GP 2	Forward-looking human resource planning	**GP 2.1**	Develop a forward-looking and sound human resource management strategy.
		GP 2.2	Develop capacity to build and use appropriate simulation models for planning.
		GP 2.3	Develop ministry capacity in conducting functional analyses (management audits).
GP 3	Education Management Information System (EMIS)	**GP 3.1**	Widen the scope of education data collection.
		GP 3.2	Disseminate and deploy capacity-building and training.
		GP 3.3	Identify and fill existing gaps.
		GP 3.4	Develop a strategic plan.
		GP 3.5	Establish an M&E system.
		GP 3.6	Establish a web-based EMIS and enhance the role of the Statistics and Research Unit.
		GP 3.7	Improve the prerequisites of quality.

Policy Doman: Governance, Planning, Management, Funding, and M&E Policies (GP)			
Policy Issues		Policy Recommendations	
GP 4	Efficiency and effectiveness of the education system	**GP 4.1**	Standardize the process by which school effectiveness is evaluated.
		GP 4.2	Run comprehensive cohort analyses for both primary and secondary education.
		GP 4.3	Produce a yearly school improvement plan.
		GP 4.4	Develop a dedicated strategy to cope with out-of-school children.
		GP 4.5	Carry out a feasibility study on streaming practices to identify assets and drawbacks in this policy.
		GP 4.6	Identify potential wastage in the system through a public expenditure tracking survey (PETS).
GP 5	Leadership and accountability	**GP 5.1**	Define the specific functions of the Ministry of Education.
		GP 5.2	Establish a policy coordination platform to enhance intra- and inter-ministerial coordination.
		GP 5.3	Strengthen and ensure adherence to existing regulatory frameworks and develop accountability measures where needed.
		GP 5.4	Increase meaningful participation of school leaders in governance and management decision-making processes that concern schools.
		GP 5.5	Improve technical support and professional development for supervisors and managers.

Conclusion

Compared with many countries in the Caribbean region, SKN demonstrates a remarkable commitment to improving its national education system. Since achieving full internal autonomy in 1967, the SKN has transformed its education system from a fragmented to a well-integrated national system. After reform began with the introduction of the 2005 Education Act, investment in education increased from 3.9% of GDP in 2005 to 4.63% in 2009 (World Bank, 2016; Rossel-Cambier and Romagnoli, 2009).

To meet evolving national aspirations and global demands, the Government of SKN is fully committed to continuing to design and implement the next five-year strategic plan in the context of current reforms. Drawing on this education policy review, it will further invest heavily in the national system.

SKN has achieved remarkable progress in improving the quality, access and equity of its national education system. As of the time this review was conducted, the country was making significant progress towards universal primary education (UPE) as well as universal schooling in lower-secondary education. Furthermore, it has already achieved gender parity at the primary-school level (World Bank, 2016).

However, inequities remain. While the country has increased access to primary education, the transition to secondary education remains a challenge. In 2013 only 85% of students in the relevant age group were enrolled in secondary education, and only 79.5% in primary education (World Bank, 2016).

Analysis across the four policy domains demonstrates clearly that inclusiveness is a systemic issue worthy of greater attention. In particular, the review revealed that critical aspects of current academic staff policies, curriculum development, teaching and learning environments, and policy and planning hinder, rather than promote, equitable educational opportunity. The systemic use of streaming at a young age is an especially strong case in point, yet the need to address inclusion is also apparent in other areas as well.

A general lack of coordination within ministries and between line ministers involved in education was found across and within ministries, and appears to be affecting integrity and effective governance in terms of policy design as well as implementation. The effects of this lack of coordination are particularly strong in terms of education planning and management, where the absence of sound consultation and the

simultaneous work of multiple bureaucracies have resulted in incoherence, and sometimes duplication, in policy-making. A particularly clear example of the impact of a lack of coordination on education performance emerged in relation to data management systems. Evidence suggests there is an urgent need to modernize the current EMIS system to improve data management and coordination.

In support for SKN's national vision for education in the context of Education 2030, these transversal issues will hopefully provide important clues as to how holistic revision of the current education policies will help SKN to achieve its national goals.

This review provides a strategic direction for addressing the four policy domains from a sector-wide approach and perspective. It aims to support SKN as it continues to spearhead policy reform and provide an exemplary model for the Caribbean region and beyond.

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Appendices

Appendix 1
Case study of an early career mentoring system in Scotland[22]

This case study illustrates good practices for early career mentoring. It presents the tools provided by the platform for probationary teachers (called probationers) in Scotland. This support system for new teachers was devised under the supervision of the General Teaching Council for Scotland (GTC Scotland).

GTC Scotland is an independent professional body in charge of promoting and regulating the teaching profession in Scotland. Established in 1965, it was the first such professional body for teaching and teachers in the United Kingdom and one of the first teaching councils in the world.

GTC Scotland is funded by teachers rather than public bodies. It has always been financially independent and has also had a wide range of professional responsibilities, though some decisions were previously subject to final approval by the Scottish Government. In 2011, the legislation that established GTC Scotland in 1965 was replaced by the Public Services Reform (General Teaching Council for Scotland) Order 2011, which conferred independent status on GTC Scotland (effective April 2012), with enhanced powers and greater flexibility of operation. As a result GTC Scotland became the world's first independent, self-regulating professional body for teaching.

Managed by teachers on behalf of teachers, GTC Scotland can be expected to provide a valuable answer to the question of how to best support newly qualified teachers. The GTC Scotland website describes two paths for probationer teachers: the Teacher Induction Scheme (TIS) and the Flexible Route.[23] The TIS is described below.

Teacher Induction Scheme

The TIS is a one-year training programme open to all holders of a teaching certificate issued by one of Scotland's universities. GTC Scotland supervises this programme in collaboration with the Scottish Government Education Department (the four nations

22 Based on Donaldson, 2011.
23 www.in2teaching.org.uk

of the United Kingdom enjoy a large amount of autonomy in various important fields, including education). This programme is not mandatory, and so newly qualified teachers are free to adjust its components in accordance with an alternative programme that better serves their special needs (i.e. the Flexible Route). The TIS allows probationer teachers to apply for full registration after one year (190 working days).

Teacher who participate in the programme benefit from 1) a reduction of their full-time workload by 20%; 2) dedicated time attend the training programme; and 3) access to an experienced teacher who will act as a mentor during the training year. The notable features of the programme are described in the sections below:

Timetable and training conditions

The TIS schedule starts with the development of an Initial Professional Development Action Plan (IPDAP) during the first semester (August through December), based on a first review. Trainees are then advised to attend weekly supporter meetings about the subjects defined in the IPDAP. During that time, new teachers may solicit educational visits for the observation of their teaching practice. At least five such sessions are recommended.

A probation profile is created to record the education plan and its schedule, attendance of continuing education sessions, training seminars and training visits. At the end of the first semester, the information gathered in the probation profile is used to establish an interim profile, which is assessed by local validation authorities. A poor assessment is sanctioned by a new intermediary training cycle that lasts until Easter.

The other semester (January to June) is characterized by the same alternation among seminars, education visits and continuing education sessions. The logbook for this second term defines the 'final profile' and serves as the basis for the validation examination in May/June. If the probationer fails, and after an unsuccessful first appeal, he or she can repeat the training programme on certain conditions.

Competencies required for full registration

The competencies and abilities required to pass the full registration examination are specified in the Standard for Full Registration document (SFR). This is based on three key factors: professional knowledge and understanding, professional skills and abilities, and professional values and personal commitment.

- **Professional knowledge and understanding** are related to understanding of the curriculum, pedagogy, and the education system and the school where one teaches, as well an awareness of education research and the benefits of scientific research in this field.

- **Professional skills and abilities** are related to educational practice, class management and assessment.

- **Professional values and personal commitment** are related to respecting the school's social role and its contribution to social justice and inclusion, and the willingness to pursue one's training and commit oneself to the education community.

Education volume and contents

Probationers are expected to devote 20% of their working time (or 4.5 hours per week) to professional development inside or outside their schools. It should be stressed that probationer teachers are free to use this time credit for the education contents they choose. It is nevertheless recommended to spread it over two equal halves: (1) team teaching, collaborative working and shadowing other teachers; and (2) training for devising the programme and approach for one's classes and other interesting continuous training aspects. The implementation of the education programme can take different forms: collaborative working may be performed with specialized instructors, teams from other schools, parents of pupils, school psychology services, inspectors (careers officers) and so on. The education programme also includes using educational and didactic literature (professional reading resources) and taking part in classroom-based research. Other highly original options are available, like self-training through training activities such as tutoring other colleagues and taking part in innovative projects that involve parents, extra-curricular school staff and local communities.

Teaching practice as the core of the education programme

Teachers in the TIS programme devote 80% of their working time to actual teaching. To this end, teachers are assigned to a school: a class for primary level, one or two subjects for secondary level. The assignment of probationer teachers is handled by local school heads in Scotland but is based on a convention devised by GTC Scotland that regulates the reception conditions. The convention stipulates that probationer teachers need to work in an environment that encourages training, with time for discussions and group projects, on-site mentoring, the possibility to conduct research and so forth.

A network of complementary players for the training programme

A number of key players are integral to the programme, each with a unique role and their own responsibilities. These players are the supporter (education tutor), the coordinating teacher, the school head, and the local authority probation manager.

Appendix 2
Functions of teaching councils in selected countries

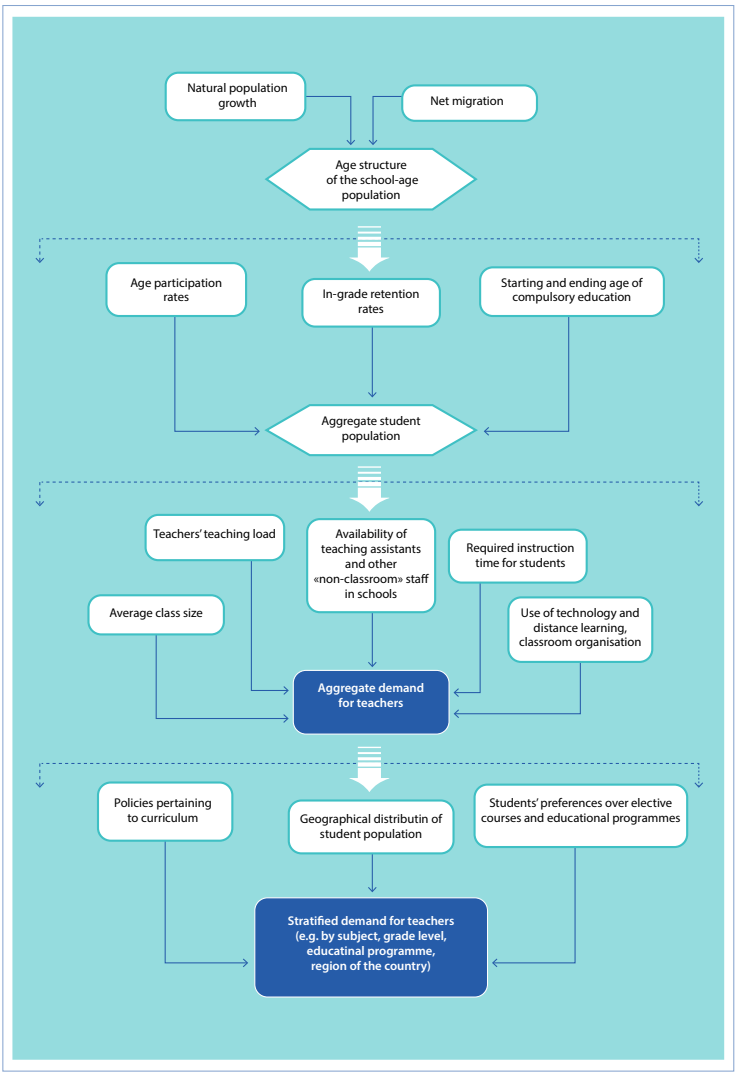
Table 17: Functions of the teaching councils in selected countries

Country	Teaching council functions
England	Maintain a register of qualified teachers Promote and support the self-regulation of the teaching profession Advise the government and other agencies on key issues affecting the quality of teaching and learning.
Ireland	Regulate the teaching profession and the professional conduct of teachers Establish and promote the maintenance and improvement of standards of: • programmes of teacher education and training • teaching, knowledge, skill and competence of teachers • professional conduct of teachers Promote the continuing education and training and professional development of teachers
Jamaica	Revise the status of the teaching profession Provide professional leadership Maintain standards Regulate, register and license teaching professionals Enhance the role of the Teaching Service Commission Provide strategic direction for training and continuing professional development Advise on teacher supply and distribution Provide quality assurance for teacher education Review and oversee conditions of service Include representatives from the Jamaica Teachers Association and the Joint Board for Teacher Education
Nigeria	Manage registration and licensing of qualified teachers Manage accreditation, monitoring and supervision of the courses and programmes of teacher training institutions Organize internship programmes for new teachers Conduct professional examinations and interviews to determine teachers suitable for registration Establish Mandatory Continuing Professional Education (MCPE) Publish a register of qualified and licensed teachers Enforce ethical conduct among teachers and the prosecute delinquent teachers Prosecute in the law courts unqualified people performing the job of teachers Initiate public policies and practices that will reposition the teaching profession in Nigeria as first among equals

Appendix 3
Determinants of the demand for teachers

The figure below illustrates the various determinants of the demand for teachers.

Figure 17 Determinants of the demand for teachers



Source: OECD, 2005, p. 62.

Appendix 4
SKN Teacher Appraisal Instrument

The following are the sections and indicators of the SKN Teacher Appraisal Instrument:

A Classroom learning environment (20%)
1. Management of classroom procedures
2. Respect and rapport
3. Culture of learning
4. Management of student behaviour
5. Organization of physical space
6. Student progress

B Lesson Planning and Preparation (30%)
1. Demonstrating knowledge of students
2. Selecting instructional goals
3. Knowledge of content
4. Knowledge of teaching methods (pedagogy)
5. Knowledge of resources
6. Designing comprehensive instruction
7. Assessing student learning
8. Preparation for instruction

C Instruction – Engagement in the Classroom (35%)
1. Gives clear instruction
2. Maintains student interest
3. Provides feedback to students
4. Shows flexibility and understanding
5. Demonstrates knowledge of content
6. Uses various teaching techniques
7. Engages students in learning activities
8. Gives appropriate assignments
9. Communicates effectively with students

D Professional Responsibilities (15%)
1. Service to profession – assisting other educators: relationship with colleagues
2. Advocacy for students
3. Participation in decision-making
4. Aware of Ministry of Education policies

5. Participates in professional development activities
6. Does non-instructional activities
7. Respects confidentiality of students and staff
8. Carries out self-assessment of professional responsibilities
9. Monitors student progress
10. Communicates with parents
11. Communicates with other teachers