The SEACMEQ V project in

SEYCHELLES

A study of the conditions of schooling
and the quality of education

SEACMEQ

Southern and Eastern Africa Consortium
for Monitoring Educational Quality

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ABSTRACT

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The SEACMEQ V Study in Seychelles: A study of the conditions of schooling and the quality of education

As part of a regional initiative comprising of sixteen Assembly of Ministries, the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SEACMEQ) Study assesses the quality of education by examining the performance and learning conditions of Primary Six pupils, along with their teachers and school heads. This study collects data on reading, mathematics and health knowledge, covering topics such as personal hygiene, nutrition, water, sanitation and HIV/AIDS awareness. Despite delays cause by the COVID-19 pandemic, Seychelles participated in the SEACMEQ V Study alongside nine other member countries, contributing valuable insights for educational policy improvements. This study draws data from 1,342 Primary Six pupils, 121 teachers and 25 School Heads, providing a national snapshot of education quality at the primary six level. This national report is structured into nine chapters, covering (1) the study's background and Seychelles' education system; (2) research methodology; (3) pupil characteristics and learning environments; (4) teacher and classroom conditions; (5) school leadership and institutional profiles; (6) access to educational resources; (7) pupil achievement in reading and mathematics; (8) HIV/AIDS and health knowledge; and (9) an agenda with policy recommendations. The findings aim to inform evidence-based strategies for improving education quality in Seychelles.

Keywords: SEACMEQ V, Seychelles, education quality, Primary Six pupils, pupil achievement, reading, mathematics, health knowledge, policy research, primary six education.

ACRONYMS

AIDS	Acquired Immuno Deficiency Syndrome
ANHRD	Agency for National Human Resource Development
COVID	Coronavirus disease
EMIS	Education Management Information System
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
IBE-	UNESCO International Bureau of Education
IECD	Institute of Early Childhood Development
IPAM	Improving Pupil Achievement in Mathematics
MA	Master of Arts
MBA	Master of Business Administration
MoE	Ministry of Education
MTS	Medium-Term Strategy (MTS)
NAF	National Assessment Framework (NAF)
NIHSS	National Institute of Health and Social Studies
NRTs	National Research Teams
PCs	Professional Centres
PLHIV	People living with HIV
PSB	Public Service Bureau
SACMEQ	Southern Africa Consortium for Monitoring Educational Quality
SALS	School of Advanced Level Studies
SBSA	Seychelles Business Studies Academy
SEACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SIAD	Seychelles Institute of Art and Design
SIAH	Seychelles Institute of Agriculture and Horticulture
SIT	Seychelles Institute of Technology
SITE	Seychelles Institute of Teacher Education
SMA	Seychelles Maritime Academy
SQA	Seychelles Qualification Authority
STA	Seychelles Tourism Academy
TEC	Tertiary Education Commission
TGMI	The Guy Morel Institute
TMD	Teacher Management and Development
TVET	Technical and Vocational Education and Training
UNAIDS	Joint United Nations Programme on HIV/AIDS
UniSey	University of Seychelles

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Chapter 1: Setting of the Study

1.1 Introduction

The Republic of Seychelles is a small island developing state located in the southwestern Indian Ocean, between four to ten degrees south of the equator, and approximately 1,600 kilometres from the East coast of Africa. The Seychelles consist of 115 granitic and coralline islands, covering a combined land area of 453 square kilometres, spread across an Exclusive Economic Zone of 1.3 million square kilometres. Mahe is the main island while Praslin and La Digue are the second and third largest islands respectively.

As of June 2021, the Seychelles population of African, Asian, and European origins, was estimated at 99,202 individuals (National Bureau of Statistics, 2021). According to data from the National Bureau of Statistics (2021), 87.5 percent of the population inhabits Mahé, while 8.9 percent live on Praslin and the remaining 3.6 percent are dispersed across La Digue and various other islands. The Seychelles nation is trilingual, with all three languages, Kreol (the mother-tongue), English and French officially recognised.

Seychelles is ranked as a high-income economy by the World Bank, heavily reliant on tourism, fishing, and offshore services. Tourism, driven by its pristine beaches and biodiversity, is the largest contributor to Gross Domestic Product (GDP). Tuna fishing and offshore financial services further bolster the economy. Despite its high GDP per capita, Seychelles faces challenges such as public debt, economic vulnerability, and climate change threats to its coastal resources. In 2015, Seychelles restructured its government, creating the Blue Economy Department to enhance coordination of ocean-related efforts. This initiative focuses on sustainable marine resource use, supporting the country's goal of achieving sustainable economic development based on the ocean-based economy (Seychelles Blue Economy, 2018).

1.2 The Education System

Education in Seychelles is comprehensive and coeducational, provided free of charge to all Seychellois children from Crèche to Secondary school level. Additionally, eligible Seychellois students have access to tertiary non-university education offered in institutions referred to as Professional Centres, at no cost.

There are 11 years of compulsory schooling and all children aged 5½ years are required to attend the six years of primary (P1 to P6) and five years of secondary (S1 to S5) of compulsory education. Each year group maintains a relatively stable population, of approximately 1,500

students, (EMIS, 2018, 2019, 2020). It is worth noting that over the past years, the total enrolment in both public and private primary and secondary schools have hovered around 17,000 students.

1.2.1 Pre-primary (crèche) Education

While crèche education remains optional in the Seychelles, almost all children (nearly 100%) aged between 3½ and 5½ years attend crèche. Each of the 24 districts has a state crèche and five districts have an additional satellite crèche, resulting in 29 state crèches. These crèches are administered by the head of the primary school in each district. In addition to the state-run crèches, there are 9 private crèches, some of which are referred to as reception years (EMIS, 2022).

1.2.2 Primary Education

Primary education in Seychelles is offered in 30 primary schools (24 public (21 on Mahe, 2 on Praslin and 1 on La Digue) and 6 private schools (5 on Mahe and 1 on Praslin)). In 2021, the collective enrolment in both public and private primary schools was 9,441 students, with a nearly equal gender distribution of 51% male and 49% female (EMIS, 2022) compared to 9509 students in 2020 (52% male and 48% female). Enrolment in state primary schools represented 85% while enrolment in private schools accounted for 15% of the primary student population.

The size of these primary schools varies, ranging from establishments with just one class per year group to larger institutions accommodating up to six classes per year group. On average, each school comprises around three classes per year group. Advancement through primary education is automatic, culminating in the End of Key Stage 3 Primary Six National Examinations. However, there is a Grade Repetition and Accelerating in Primary and Secondary Schools Policy (2020) which provides guidelines for the aforementioned cases.

Additionally, there are End of Key Stage 1 Assessments upon completion of Primary 2 and End of Key Stage 2 Assessments upon completion of Primary 4. These assessments, along with the Primary Six National Examinations, adhere to the guidelines outlined in the National Assessment Framework (2013).

Children in public schools attend primary education within their respective districts, following a Zoning Policy. Furthermore, in alignment with the National Inclusive Policy (2013), there exists a School for the Exceptional Child that caters specifically to children with disabilities and special needs education.

1.2.3 Secondary Education, Higher-Secondary Education and TVET

Upon completion of primary school, all students enter secondary school at S1. Secondary education in Seychelles is delivered in 15 secondary schools (11 state (9 on Mahe, 1 on Praslin and 1 on La Digue) and 4 private). The public secondary schools operate regionally.

The total enrolment in 2021 was 7282 students (50% male and 50% female) compared to 7,174 students in 2020. Of the total secondary student enrolment, state enrolment represented 88% while private enrolment represented 12% (EMIS, 2022).

At the end of Secondary 3 (S3), students sit for the S3 Co-ordinated examinations and, depending on their performance and interests, they can choose between the Academic pathway and the General Secondary Education and Skills Development pathway for the last two years of compulsory education. The General Secondary Education and Skills Development pathway comprises a school-based and a work-based component. Students in the Academic pathway who are eligible can later sit for IGCSE exams while others will sit for national examinations at the end of S5. Upon successful completion of Secondary 5, based on the choice and eligibility, students may join the Schools of Advanced Level Studies (SALS) or a tertiary non-university education and training institution.

1.2.4 Non-University Tertiary Education and Training

Tertiary non-university education and training in Seychelles is offered in 10 public institutions known as Professional Centres (PCs). These include the Seychelles Institute of Technology (SIT), Seychelles Institute of Agriculture and Horticulture (SIAH), Seychelles Business Studies Academy (SBSA), Seychelles Institute of Art and Design (SIAD), Seychelles Maritime Academy (SMA), Seychelles Institute of Teacher Education (SITE), Seychelles Institute of Distance and Open Learning (SIDOL), National Institute of Health and Social Studies (NIHSS), Seychelles Tourism Academy (STA), and The Guy Morel Institute (TGMI). In 2021, all PCs were under the auspice of the Ministry of Education, except for STA and NIHSS which were under the Ministry of Tourism and the Ministry of Health, respectively.

In 2021, 3,107 students (67% female, 33% male) were enrolled in tertiary non-university education and training institutions, with 64% aged below 21 years. Since all Professional Centres are on Mahe, the government provides accommodation at the Youth Hostel to Praslin and La Digue S5 school leavers enrolled into SALS or a Professional Centre but who do not have alternative accommodations on Mahe. All post-secondary students benefit from a bursary from the government and free bus pass. Additionally, the Praslin and La Digue students residing

in the Youth Hostel benefit from a monthly allowance and a monthly return boat fare to Praslin or La Digue.

Professional Centres collaborate actively with the Tertiary Education Commission (TEC), Seychelles Qualification Authority (SQA), Agency for National Human Resource Development (ANHRD), Ministry of Education and other pertinent agencies through formal structures such as boards and committees.

1.2.5 Tertiary University Education and Training

The University of Seychelles (UniSey) was established in September 2009, having been registered and licensed by the Government of Seychelles as the national university. It aims to provide high-quality, innovative, and market-oriented professional, undergraduate, postgraduate and research programs. UniSey has become the university of choice for Seychellois students, offering both internationally recognized qualifications and specialist homegrown degrees locally (UniSey website).

Each year, the university broadens its range of courses, offering diplomas, bachelor's, and master's degrees. It also fosters a robust research culture. UniSey has established five research institutes that collaborate closely with the faculties to enhance research activities and build connections with organisations sharing similar interests. With two campuses in Mahé, the main campus at Anse Royale hosts most of the degree courses and serves as the administrative centre of UniSey. The Mont Fleuri campus is home to the India-Seychelles Centre of Excellence in Information and Communication Technology (UniSey website). In 2021, there were 270 learners (62 males & 208 females) enrolled in UniSey of which 140 were new entrants (year 1) (EMIS, 2022).

Apart from UniSey, students pursuing tertiary education and training can receive scholarships from the government to study at various overseas universities. In 2021, 586 learners (comprising 28% males and 72% females) were enrolled in tertiary level education and training institutions locally and overseas under the government scholarship administered by the Agency for National Human Resource Development (ANHRD) (EMIS, 2022). The ANHRD is responsible for promoting human resource development in Seychelles to enhance national skills and establish a framework for human capital development.

Of the total 586 learners, 214 students (comprising 44 males and 170 females) were enrolled at the University of Seychelles, 13 students (3 males and 10 females) at The Guy Morel Institute, and the remaining 359 students (comprising 120 males and 239 females) were

enrolled in various overseas institutions. Additionally, the ANHRD recorded 83 returning graduates (19 males and 64 females) and awarded 266 government scholarships (78 males and 188 females) for the year 2021 (EMIS, 2022). It is worth noting that Business, Administration and Law was the most (37%) opted field of study.

1.2.6 Teacher Training

The institutionalisation of teacher education and development for quality teachers in Seychelles began in 1959 with the establishment of the Teacher Training College. From 1999, teacher education was provided by the National Institute of Education (NIE) under the auspices of the Ministry of Education until its integration into the University of Seychelles in 2010. The Seychelles Institute of Teacher Education (SITE) was established in January 2014 following the demerger of the former NIE from UniSey, in accordance with the Tertiary Education Act 2011. As a state, non-university tertiary education institution, SITE is eligible to confer qualification from Certificate to Advanced Diploma, Level 6 on the National Qualifications Framework (2008), (SITE Strategic Plan, 2018-2022). SITE may also offer programmes beyond Level 6 in partnership with renowned universities or higher education institutions.

Documentary evidence from the past decade reveals that teacher retention remains one of the major concerns of the Seychelles education system (Dos Santos, 2016; Motlotle, 2017; Task Force Report, 2017; Teacher Retention Report, 2014, cited in Teacher Management and Development Situational Analysis Report, 2019). Improving the quality and retention of teachers were priority areas in the Medium-Term Strategy (MTS) 2013-2017 and remains a priority area in the MTS 2018-2022. These efforts focus on Teacher Recruitment, Deployment, Development, and Retention to support the teaching profession and strengthen teacher education for better learning outcomes and the professionalization of the teaching profession. This aligns with the Education 2030 Agenda, which emphasizes that "teachers are the key to achieving all of the SDG4 targets" and that they are "a fundamental condition for guaranteeing quality education." According to UNESCO, "teachers and educators should be empowered, adequately recruited and remunerated, motivated, professionally qualified, and supported within well-resourced, efficient and effectively governed systems" (Teacher Management and Development Situational Analysis Report, 2019, p.7).

In the same vein, teacher training remains a major concern. Over a period of six years, from 2015 to 2021, there were 336 SITE graduates, of which only 106 were pre-service learners. Among the 222 in-service graduates, 120 graduated in 2021 with partial fulfilment of a

Diploma in Education, awarded as a sense of achievement through the Blended Learning Mode. (SITE Annual Report, 2021). As for the UniSey graduates trained by SITE, during the same period, from 2015 to 2021, there were 45 graduates, of which 12 were pre-service and 33 were in-service (SITE Annual Report 2021).

As a result of the teacher shortage, a significant number of expatriates were recruited, constituting about 30% of the teaching staff. According to EMIS 2021, there are 497 full-time teaching staff in state primary schools, comprising 25 expatriates and 472 Seychellois. In state secondary schools, there are 547 full-time teaching staff, with 214 expatriates and 333 Seychellois. This means that about one-quarter of the teaching staff in state primary and secondary schools are expatriates.

Moreover, according to the Indicator Report 2021, recruiting students to train as teachers is a persistent challenge, as teaching remains an unpopular career choice for many Secondary 5 school-leavers. Additionally, it is difficult to attract enough students who meet the necessary academic requirements.

The development of the Teacher Management and Development Policy (2020) aims to address many of these critical issues in education with focus on Teacher Recruitment, Deployment, Development, and Retention. This initiative aims to bolster the teaching profession, enhance teacher education, improve learning outcomes and elevate the professional standards within the field of education.

1.2.7 Curriculum Development

The National Curriculum Framework was developed in 2013 to guide the teaching and learning processes in Seychelles schools. It sets out the key principles for curriculum development, which inform the diverse teaching and learning programs within the education and training system. The framework specifies the knowledge, skills, and values that students should acquire, aiming to promote essential attitudes and foster lifelong learning. It emphasizes a broad curriculum that includes literacy, numeracy, science, humanities, physical education, and social and civics education.

The National Assessment Framework (NAF) 2013 outlines various assessment models used at both the school and national levels. According to the Ministry of Education's Medium-Term Strategy (MTS) 2018-2022, the goal is to prepare students to adapt to the evolving demands of the world. The curriculum and assessments are designed to reflect the principles of "learning

to learn," "learning to do," "learning to live together," and "learning to be," while acknowledging that students have varied learning capacities.

With the support of IBE-UNESCO, a competency-based curriculum was introduced for primary and secondary education. This includes the creation of level descriptors for assessment, particularly for subjects that are examined. Additionally, competencies in literacy and numeracy were developed with the help of SACMEQ. These efforts aim to ensure that the curriculum is both comprehensive and aligned with international best practices.

1.2.8 Administration of school education

Over the past decade, government spending has consistently demonstrated a strong commitment to the education of Seychelles' youth. Budget allocations have nearly doubled over the past seven years, increasing from about 4.4 million rupees in 2014 to approximately 8.3 million rupees in 2021, with high inflation being a key factor. The education budget in Seychelles has averaged 8.2% of the total budget over the past eight years, with a peak of 9.6% in the 2018 budget.

In Seychelles, budget expenditure for education is a mix of centralized and decentralized processes. The Ministry of Education establishes a regulated framework that applies uniformly to all schools, ensuring consistency across the system. This framework covers the implementation of a standardized national curriculum, allocation of common resources, and provision of teaching and learning materials. While individual school heads are responsible for managing their schools, they do so under the guidance of the Ministry, which oversees facilities, resources, staffing, and budget allocations.

A key objective of the education system is to ensure equal opportunities for all students and the equitable distribution of resources. Recent reforms aim to grant more autonomy to schools by empowering school heads to make decisions on key operational matters, thereby enhancing their accountability and fostering a more decentralized approach to management.

The Professional Centres (PCs) operate under a Decentralized Authority Framework that grants them significant responsibility and accountability in areas such as administration, human resources, finances, and operations. As of January 2018, the framework allows PC Boards, Directors, and their Senior Management teams considerable discretion over organisational matters, including management systems, controls, human resource management, procurement,

asset investment and management, external relations, and governance. While PCs must adhere to centrally managed requirements (Finance and the Public Service Bureau (PSB) rules and regulations), they now have substantial management responsibilities that were previously not within their scope. This framework is designed to empower and enable the Boards, Directors, and management of the PCs to take a more active role in decision-making and leadership.

1.3 Education Policy

Over the past two decades, the Seychelles education system has been guided by four key principles: Education for Empowerment, Education for Productivity, Education for Social Cohesion and Education for Global Participation. These principles are outlined in the education policy entitled *Education for a Learning Society* (Ministry of Education, 2001). These policies establish a framework for developing and implementing structures and strategies for equity, quality and accountability deliver quality education and training opportunities to all Seychellois.

Equity: Ensuring equal access to compulsory education, equitable distribution of resources, equal opportunities for optimal achievement, and catering for the needs of learners with special requirements. This also involves creating a context, content, and medium of education that are equally favourable for both boys and girls.

Quality: Focuses on institution-based planning for development and improvement, integrating mechanisms for monitoring and self-evaluation, external and internal evaluation complementarities, fostering a culture of learning within institutions, enhancing institutions through staff development, integrating evolving technologies, striving for service excellence, and facilitating stakeholder participation in education.

Accountability: Emphasising partnerships with parents and communities, target setting and development planning, transparent reporting on performance, integration of assessment into education, teaching, and evaluation processes, cost-effectiveness through efficient resource utilization, and nurturing professional attitudes of accountability among teachers and students.

From an outcomes perspective, the education system is oriented towards achieving learning outcomes, empowerment, productivity, social cohesion, and global participation. These principles underpin Seychelles' commitment to providing a comprehensive and effective education system that serves the needs of its population.

1.4 The SEACMEQ Consortium

The Southern and Eastern Africa Consortium for Monitoring Educational Quality (SEACMEQ) is a network comprising ministries of Education situated in the Southern and Eastern Africa Sub-region. SEACMEQ's primary objective is to conduct cooperative policy research to generate information that aids decision-makers in planning and enhancing the quality of education. The educational policy research program adopted by SEACMEQ incorporates three key features that have enhanced its contributions to educational planning. First, it furnishes research-based advice on high-priority educational policy matters identified collaboratively. Second, it integrates research and training activities aimed at fostering long-term institutional capacity building. Third, the Ministries of Education, through decisions made during the biennial SEACMEQ Assembly of Ministers, possess ownership of the scope and future directions of SEACMEQ's research and training program. SEACMEQ has already conducted four major studies.

- SACMEQ I (1995-1998),
- SACMEQ II (2000-2002),
- SACMEQ III (2005-2008),
- SACMEQ IV (2013-2017).

The Ministry of Education of Seychelles did not partake in SACMEQ I. Nonetheless, by 1998 Seychelles had become a full-fledged member and actively participated in subsequent SEACMEQ studies, including SACMEQ II - IV, and presently, SEACMEQ V.

1.4.1 Impact of SACMEQ II in Seychelles

SEACMEQ has had considerable influence on the education system of Seychelles. A few selected examples include:

- the implementation of a non-streaming policy
- the development of the Improving Pupil Achievement in Mathematics (IPAM) Project
- the development of a study on Special Needs Education
- the evaluation of the School Improvement Project and Child Development Study
- inputs to the formulation of the assessment policy
- educational reforms relating to Early Childhood Education and the re-structuring of secondary education
- serving as a model for designing and conducting the Seychelles Integrated Adult Literacy Survey (SIALS).

Moreover, the SEACMEQ training component, which accompanies all SEACMEQ research endeavours, has provided planners with advanced skills in educational research, planning, and management. Lastly, findings from the SACMEQ II project have sparked high-level policy discussions concerning the quality of education in Seychelles. These discussions have led to broader debates surrounding the evaluation of the school curriculum, teacher training in differentiated pedagogies, the utilization of achievement levels in teaching, pupil assessment, curriculum leadership training, and the involvement of parents and the community in pupil learning.

1.4.2 Aims of SACMEQ III

The aims of the SACMEQ III Project were to:

- determine if the conditions of primary schooling have improved, remained the same, or deteriorated between 2000 and 2007.
- determine changes in the level of access about human and material resources within regions and across regions within countries.
- determine if reading and mathematics achievement of Primary Six pupils and their teachers in 2007 in Seychelles has improved, remained the same or deteriorated between 2000 and 2007.
- undertake a special sub-study on HIV AIDS issues in primary schools.

1.4.3 Aims of SACMEQ IV and SEACMEQ V

The aims of the SACMEQ IV and SEACMEQ V Projects were to:

- identify the personal and home background characteristics of Primary Six pupils that may influence education equity, and impact upon teaching and learning.
- examine the school contextual factors experienced by Primary Six pupils that may impact teaching/learning and the general functioning of the schools.
- assess whether Primary Six pupils have adequate access to classroom materials necessary for full participation in their lessons.
- determine whether Primary Six pupils have access to library books and other technology-related sources of information within their schools, and whether these resources are utilised effectively, with opportunities for pupils to borrow the books.
- investigate the prevalence of extra lessons outside school hours for Primary Six pupils, whether these lessons are paid, and the potential implications of this practice.

- determine the personal characteristics of Primary Six teachers in terms of teacher quality and pupils' achievement.
- assess the impact of school heads' personal characteristics, in terms of age and gender, on pupil achievement.
- explore the school heads' views on inspections, community input, and problems related to pupils and teachers.
- measure the achievement levels and variations in Reading and Mathematics performance between Primary Six pupils and their teachers.

1.5 The SEACMEQ V Project

The implementation of the SEACMEQ V study began with a working meeting held from 7th to 12th October 2018 in Johannesburg, South Africa. SEACMEQ's fifth research project aims to collect data to inform the development of educational policies. The study is designed to gather data on Grade/Standard/Primary Six Reading, Mathematics, and Health Knowledge tests, along with questionnaires and teacher tests providing background information on primary schools, School Heads, Primary Six teachers, and Primary Six pupils. A new feature of SEACMEQ V is the incorporation of items on Health Knowledge focusing on topics such as Personal Hygiene, Nutrition, Water, Sanitation, and Harmful Substances & Effects.

Originally planned to run from August 2018 to September 2022, the SEACMEQ V project was delayed due to the impact of the COVID-19 pandemic. After consultations with member Ministries regarding the pandemic's effects on school calendars and planned SEACMEQ V activities, the Chairperson of the SEACMEQ Assembly of Ministers postponed the main data collection for SEACMEQ V to August - October 2021. However, significant variations in COVID-19 disruptions within countries led to substantial gaps in implementing data collection. Consequently, the main data collection deadline was extended to December 2022, shifting the SEACMEQ V implementation plan to 2024 (seacmeq.org).

Only twelve out of the sixteen member Ministries of Education (75%) confirmed their active participation in the SEACMEQ V study. These included Ministries of Education in Angola, Botswana, Kenya, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Uganda, Zanzibar, and Zimbabwe. By the Consortium's collaborative approach, the other four non-participating member Ministries (eSwatini, Lesotho, Tanzania (Mainland), and Zambia) were encouraged to remain involved in the project as observers (seacmeq.org).

1.6 The structure and contents of the report

This report comprises nine chapters. Following this introductory chapter, the eight subsequent chapters delve into various aspects of the study.

Chapter 2 outlines the procedures used to conduct the SEACMEQ V study, providing detailed descriptions of the development of instrumentation and the execution of the fieldwork. It primarily focuses on the common elements of the SEACMEQ IV Project research program across different countries.

The subsequent seven chapters of the report focus on the educational policy implications derived from the data analyses, with each chapter addressing one of the main policy questions introduced in the first chapter:

- Chapter 3 examines the personal characteristics, home backgrounds, and aspects of the learning environment of Primary Six pupils.
- Chapter 4 discusses the characteristics of teachers and classroom conditions.
- Chapter 5 explores the characteristics of school heads and the types of schools attended by pupils.
- Chapter 6 investigates access to physical and human resources in schools and classrooms.
- Chapter 7 reports on pupils' achievement results in reading and mathematics.
- Chapter 8 analyses the knowledge and attitudes of pupils and teachers toward HIV and AIDS issues.
- Chapter 9 presents an 'Agenda for Action', summarizing policy suggestions, categorizing them by cost (low to high), and indicating whether they involve short-, medium-term, or long-term actions.

Chapter 2: The Conduct of the Study

Over the years since its first project in 1995, SEACMEQ has developed research instruments and collected useful information using advanced research methods. An important principle in the studies is to ensure that SEACMEQ can generate valid measures of levels and changes in achievement: (a) across countries at single time points, and (b) across time points for individual countries. To achieve this goal SEACMEQ follows virtually the same methodologies across studies and uses the same instruments which must be kept confidential to remain valid. The methodology and instruments that were used in the SEACMEQ V project in 2020 were, therefore, the same as in SACMEQ II, III and IV. For a detailed account of the study design, sampling techniques and the development of the instruments reference should be made to the second chapter of the SACMEQ II report. In response to growing new issues surrounding learner health and life skills, SEACMEQ V research project includes items on HIV and AIDS, as well as items on other topics in the Health Knowledge Test (HKT) for Grade/Standard/Primary 6 pupils and their teachers. The other topics covered include Personal Hygiene, Nutrition, Water, Sanitation, and Harmful Substances & Effects.

SEACMEQ V project was adversely hampered by the global COVID-19 pandemic right at the time the main data collection was to commence. All member countries were financially and logistically so affected that some countries withdrew from implementing the study. Therefore, the focus of the project was on conditions of schooling and the quality of education in nine school systems of: Botswana, Kenya, Malawi, Mauritius, Namibia, Seychelles, South Africa, Zanzibar, and Uganda. Mozambique conducted the study under circumstances that do not permit it to compare their results with other participating countries but can use the results for informing some of their national education policy interventions. Angola, eSwatini, Lesotho, Tanzania (Mainland), Zambia, and Zimbabwe did not implement the study. The purpose of the project was to gather information on a) the general conditions of schooling, b) the reading and mathematics achievement levels of Grade 6 learners and their teachers, and c) the levels of knowledge that learners and their teachers have on HIV/AIDS, and on other new health topics. The main data collection for the project involved a total of approximately **41, 301** (*62, 218*) learners, **5, 237** (*6, 667*) teachers, and **1, 688** (*2, 507*) School Heads. The figures in brackets are for SACMEQ IV study. In Seychelles, the main data collection involved 1,342 learners, 121 teachers and 25 School Heads.

In this chapter specific aspects of the methodology followed in SEACMEQ V project are outlined and these include a description of the samples drawn, data collection, data cleaning and data analysis.

2.1 The Study Population

(a) Desired Target Population

The desired target population definition for SEACMEQ V Project was the same (except for the year) as for the SACMEQ II, III, and IV Projects. This consistency was maintained to be able to make valid cross-national and cross-time estimates of "change" in the conditions of schooling and the quality of education.

The desired target population definition for SEACMEQ V Project is as follows:
"All learners at Grade 6 level in 2020 (at the first week of the eighth month of the school year) who were attending registered mainstream (primary) schools."

(b) Excluded Target Population

One of the rules followed by SEACMEQ for ensuring valid data in large-scale studies is that no more than 5 percent of the learners in the desired target population may be excluded from the defined target population. Like in SACMEQ II, III, and IV, special schools that provide education to learners with severe educational needs were excluded from SEACMEQ V sample. "Small" mainstream schools, which had less than 15 learners enrolled in Grade 6 in 2020, were also allocated to the excluded population to reduce data collection costs – without the risk of leading to major distortions in the study population.

(c) Defined Target Population

The "defined target population" was constructed by removing the "excluded target population" from the "desired target population". In Table 2.1, the numbers of schools and learners in the desired, defined and excluded populations are presented.

Table 2.1: Desired, Defined, and Excluded Populations

	Desired		Defined		Excluded		Pupils % Excluded
	Schools	Pupils	Schools	Pupils	Schools	Pupils	
Seychelles	27	1,509	25	1,419	2	90	6%

From the last column of **Table 2.1** it is observed that the excluded population of learners (6%) was slightly more than the stipulated 5 percent to meet the SEACMEQ criteria for accuracy in large-scale assessment data. However, this exclusion has no adverse effects on Seychelles

results because the whole defined population of Primary Six pupils participated in the study. The two private schools that were excluded from the study offer instructions using a different curriculum and one of them has French as the language of instruction.

2.2 Data Collection

In this report "Data Collection" includes preparations before the field work, the actual field work and activities that followed field work to prepare the data collection instruments for safe storage.

(a) Preparations for the main data review

Preparations focused on instrument review, communication to schools, printing and distribution of instruments and training of data collectors.

(b) Instrument review

As soon as the 2017 SEACMEQ Assembly of Ministers took a decision to conduct SEACMEQ V project in 2020, the National Research Teams (NRTs) under the auspices of the SEACMEQ Coordinating Centre (SCC), set out to prepare and update the instruments (tests and questionnaires). Between 2018 and 2019 the SEACMEQ Coordinating Centre hosted three working sessions for the NRTs in Johannesburg (South Africa), Port Louis (Mauritius), and Windhoek (Namibia) that were focused on reviewing existing test items and ensuring that, where there had been curriculum changes, the items were still relevant. As a result, several new reading passages and related test items, and mathematics test items were developed to potentially replace some of the older test items. Further, items on new Health Knowledge topics such as Personal Hygiene, Nutrition, Water, Sanitation, and Harmful Substances & Effects were developed to become possible replacement for some of the old HIV/AIDS items. Following the pre-testing and pilot-testing of the new items, equivalent items were selected to replace some of the older items while ensuring that enough old items were carried on to SEACMEQ V for linking purposes. SEACMEQ V instruments were pre-tested in a few primary schools in Uganda, and then pilot-tested in eight member countries. The pilot study was intended to ensure that the language in SEACMEQ V tests was accessible to learners, there were no cultural biases in the items, and learners comprehended how to write their responses.

In some countries the tests were subsequently translated into respective language(s) of instruction (e.g., Portuguese, Afrikaans). Care was taken to ensure that the English and other languages used for the tests were equivalent to avoid unfair advantage in any of the language(s).

NRTs and specialists at the SEACMEQ Coordinating Centre carried out the final statistical and content validity and reliability checks of the instruments and declared the instruments ready to be printed and taken to the field.

(c) Communication to schools

Officials in the respective Ministries of Education informed the sampled schools through the regional offices during mid-2020. The National Research Teams were responsible for distributing the data collection schedules, as well as intensifying and monitoring communication to schools and data collectors.

(d) Printing and distribution of data collection instruments

Data collection instruments included a) School Head Booklets, b) School Information Booklets, c) Teacher Booklets, d) Pupil Booklets e) Pupil Name Forms f) School Forms, and g) Data collection manuals. Each participating country received print-ready copies from SEACMEQ Coordinating Centre (SCC) and was responsible for printing correct numbers of copies for their respective schools.

After all instruments were printed, the NRTs conducted a "hand check" of all materials to verify that there were no missing/extra pages, misprints, or omissions. All work related to the printing and packaging of the data collection instruments was undertaken under strict security arrangements, so that there was no possibility of "leakage" of information about the content of the learner and teacher Reading, Mathematics, and Health Knowledge tests.

The printed materials were distributed to leaders of research teams who were assigned to collect data in each school. The Team Leaders were responsible for checking the accuracy of the instruments in terms of correctness of numbers and languages before carrying the instruments to the schools. The first level of checking was done during data collection training sessions. The data collectors were charged with further and final checks a day before the data collection.

(e) Training of data collectors

On the first day of training the NRT presented a "simulated" data collection exercise in which they acted as data collectors and the trainees took the roles of learners, teachers, and School Heads. The second day involved an intensive study of the Manual for Data Collectors. This document sets out, in sequential order, all the actions to be taken by the data collectors from the time of receiving packages of data collection instruments from the Ministry of Education to the time when the data collectors had completed the data collection and was preparing all

materials for return. The third day involved a second "simulated" data collection whereby the trainees supervised fully-fledged data collection in several schools that were not involved in the main data collection. The experiences gathered during these exercises were shared and discussed during a meeting so that all data collectors understood the procedures to be completed within schools.

2.3 Main Data Collection

"Main Data Collection" in this report refers to the actual fieldwork. A minimum of three data collectors were assigned to three sampled schools to carry out the data collection exercise in. Special effort was made to ensure that data collection was conducted according to explicit and fully scripted steps so that the same verbal instructions were used (for learners, teachers, and School Heads) by the data collectors in all sample schools, in all countries, and for each aspect of the data collection. This was a very important feature of the study because the validity of cross-national comparisons arising from the data analyses depended, in large part, on achieving carefully structured and standardized data collection environments.

The first two countries (Kenya and South Africa) collected data during August-September 2021. Due to significant variation in within-country COVID-19 disruptions, huge gaps existed among participating countries in implementing data collection such that the last country carried out data collection in March 2023. Despite delays due to the pandemic across all participating countries and change in leadership and restructuring of the Ministry of Education, Seychelles honored its commitments and diligently managed to administer all instruments on the 19th and 20th October 2021 in all the 25 schools spreading across three Islands, including one private school from the main Island, Mahé.

Two days of data collection were required for each school. On the first day data collectors gave Primary Six pupils Reading test, Health Knowledge test, and Pupil Questionnaire Part D. Pupil Questionnaire Part D required pupils to get confirmation of the accuracy of their responses from their parents/guardians, therefore it was taken home by the pupils and returned to school the following day. On the second day, the pupils wrote the mathematics test and copied their responses from the Pupil Questionnaire Part D to part D of the main Pupil Booklet.

In addition to completing a questionnaire, Primary Six teachers who taught Reading, Mathematics and Life skills\Health were required to write respective tests. School Heads or delegated members of the senior management team completed the School Head Booklets,

School Information Booklet, and School Form. The data collectors populated the Pupil Name Forms using the class registers and other necessary official records from the schools.

The data collectors were provided with a 40-point checklist to ensure that they completed all important tasks that were required before, during, and after their visits to schools. Each task was cross-referenced to specific pages of instructions in the data collectors' manual. The data collectors also checked all completed questionnaires (Pupil, Teacher, and School Head) and, if necessary, obtained any missing or incomplete responses on the second day before they left the school. The materials were then handed over to the Regional Coordinator for safekeeping, "hand editing" and dispatching to the National Research Coordinator (NRC) at the Ministry of Education as soon as all data collection was completed.

2.4 Sampling and Sample Characteristics

Seychelles did not sample schools and Primary Six pupils, rather, a census was conducted in which all eligible primary schools and Primary Six pupils in the country were involved in the study.

The numbers for schools and learners in the study are presented in Table 2.2.

Table 2.2: Planned and Achieved Samples for SEACMEQ V

	Schools			Learners	
	Planned	**Achieved**		**Planned**	**Achieved**
Seychelles	25	25		1,419	1,342

2.5 Response rates

The size and the quality of the sample are critical to the accuracy of the research. Since Seychelles usually conducts a census, the response rate is the only characteristics that SEACMEQ monitors for the country in all such projects. The response rates for SEACMEQ V project in Seychelles is presented in Table 2.3. Figures in the two columns under the heading "Response Rate (%)" in Table 2.3 are the response rates for schools and learners, respectively.

Table 2.3: Response Rates for SEACMEQ V

	Response Rate (%)	
	Schools	**Pupils**
Seychelles	100	94.6

Response rate in this study refers to the percentage of the total planned pupils who participated in the study. The SEACMEQ rule is that the overall response rate for both schools and learners

should not be less than 90%. In Seychelles, the response rate was 100 percent for schools and 94.6 percent for pupils. As both response rates exceed the 90 percent threshold, it can be concluded that the study in Seychelles met the SEACMEQ response rate requirements. This indicates that the data collected in the study is based on a reliable representation of the target population and reinforces the validity of the data collected.

2.6 Data entry, Data checking and Data cleaning

In this section the processes that were followed at national level to check, enter, and clean the data have been described.

Data preparation started soon after data collection was completed. The NRCs organized safe return of all materials to the Ministry of Education where data collection instruments could be checked, data captured into computers, and data "cleaned" to remove errors prior to data analyses. Data-checking involved "hand editing" of data collection instruments by a team of trained staff. They were required to check that: (i) all questionnaires, tests, and forms had arrived back from the sampled schools, (ii) the identification numbers on all instruments were complete and accurate, and (iii) certain logical linkages between questions made sense (for example, the two questions to School Heads concerning "Do you have a school library?" and "How many books do you have in your school library?")

The next step was the entry of data into computers using the Data Management Expert (DME) software. A team of 5-10 staff members normally undertake this exercise. In the Seychelles context, the team was comprised of 10 individuals, grouped in pairs, from the Planning and Policy Development Division (PPDD) trained on how to enter data correctly using the software. The pairs were provided with booklets to make the first data entry, which were then exchanged between them for the second data entry. This process allowed the software to compare the two sets of data making sure that the right information was entered for cleaning purposes.

At individual country level, NRTs followed a "cyclical" process whereby data files were cleaned by the NRT, then emailed to the SEACMEQ Coordinating Centre for checking, and then emailed back to the NRC for further cleaning.

To clean the data using the Data Management Expert (DME) software, the NRTs followed specific directions to (i) identify major errors in the sequence of identification numbers, (ii) cross-check identification numbers across files (for example, to ensure that all learners were

linked with their own Reading and Mathematics teachers), (iii) ensure that all schools listed on the original sampling frame also had valid data collection instruments and vice-versa, (iv) check for "wild codes" that occurred when some variables had values that fell outside pre-specified reasonable limits, (v) validate that variables used as linkage devices in later file merges were available and accurate, and (vi) make sure that the data entries in the 'Main' datasets were the same as those in the 'Double Punching' datasets.

Further and more intensive data cleaning was done using the SPSS software after the six datasets were exported from DME to SPSS. During this data cleaning process, all six datasets were checked and cleaned for 'Within Instrument' and 'Between Instrument' inconsistencies. Noteworthy, the Seychelles NRC was engaged in a one week within and between instrument data cleaning in house training in November 2023 by the Technical Manager from the SEACMEQ Coordinating Centre. With a concerted team effort, the within and between instrument data cleaning was successfully completed within the given period.

2.7 Merging

After data cleaning was completed, the NRTs submitted the six datasets to SEACMEQ Coordinating Centre for further processing. At the Coordinating Centre, a further merging process was undertaken that required the construction of a single data file in which learners were the units of analysis and the rest of the data from the other respondents were linked to the learner data. That is, each record of the final data file for the country consisted of the following four components: (a) the questionnaire and test data for an individual learner, (b) the questionnaire and test data for his/her Mathematics, Reading, and Health teacher, (c) the questionnaire data for his/her School Head, and (d) school and learner forms.

To illustrate this, it was possible to examine questions of the following kind from the final merged dataset: "What are the average Reading and Mathematics test scores (based on information taken from the learner tests) for groups of learners who attend urban or rural schools (based on information taken from the School Head questionnaire), and who are taught by male or female teachers (based on information taken from the teacher questionnaire)?"

2.8 Analyzing the data

The data analyses for SEACMEQ V Project were very clearly defined because they were focused specifically on generating results that could be used to "fill in the blank entries" in given "Dummy Tables". Two working meetings were arranged to train the NRTs on data

analysis and report writing. The Aim of the working meetings was to empower the NRTs with the skills to carry out in-depth analyses of their data and produce policy briefs, infographics, and national reports. For uniformity, standard tables of results were generated by the SEACMEQ Coordinating Centre and dispatched to respective countries. There were two main tasks in this area. First, SPSS software was used to construct new variables (often referred to as "indices") or to re-code existing variables. For example, an index of "socio-economic level" was constructed by combining re-coded variables related to learners' homes, and the number of possessions in learners' homes. Second, the SEACMEQ Coordinating Centre used SPSS syntaxes to generate standard tables of results with appropriate estimates and corresponding sampling errors. The standard tables were formatted by the SEACMEQ Coordinating Centre and sent to countries for interpretation and national report writing.

2.9 Writing the SEACMEQ V National Reports

The NRT commenced the process of drafting their national reports in early 2024. A working meeting held in Mahe; Seychelles during March 2024 supported the NRT in this work. This meeting permitted the NRT to work together and exchange ideas concerning the policy implications of the research results. In the Seychelles context, following the training in March 2024, rather than assigning consultants for the writing of the SEACMEQ V report, the NRC, DNRCs and a staff from the Planning and Policy Development Division were given this task. Chapters were delegated amongst the team to facilitate and expedite the report writing process.

2.10 Conclusion

The aim of this Chapter was to describe the research procedures that were applied for the execution of SEACMEQ V project. The Chapter was prepared to give an overview of how the study was conducted in individual countries. Where applicable, the sampling design/procedures and the construction of the Reading, Mathematics and Health Knowledge tests for learners and their teachers were to a large extent modeled on the SACMEQ II, III, and IV projects.

Following the trend started in SACMEQ II project, the fifth SEACMEQ project moved away from traditional approaches of calculating test scores (based on numbers of correct responses to test items) to the use of Modern Item Response Theory to generate descriptions of "levels of increasing learner competence". This approach to describing learner Reading, Mathematics and Health Knowledge achievements offered a mechanism for describing the performance of learners in a manner that was more meaningful within the teaching and learning context.

One of the important messages that emerged from this Project was that the speed at which SEACMEQ cross-national research project proceeds can be adversely influenced by natural calamities such as the COVID-19 pandemic, and the speed with which the slowest country completes all aspects of its data collection and data preparation. Amidst all the constraints and challenges, Seychelles has demonstrated unwavering commitment to complete the SEACMEQ V Report. The Report highlights the progress made at National level over the years since becoming a member.

Chapter 3: Characteristics of Pupils and their Learning Environment

3.1 Introduction

3.1.1 Regions used in this report

A total of 25 Primary schools was surveyed in this study of which included one private school. The schools were grouped across six regions based on geographical clusters that have been established since the early 1980s for networking purposes by the MoE and has been used for teaching and learning support to schools. The schools included in each region were as follows:

Central:	Bel Eau, Independent, Perseverance, La Rosière, Mont Fleuri, Plaisance
East:	Anse Aux Pins, Cascade, Pointe Larue, Au Cap
Island:	Baie Ste Anne, Grand Anse Praslin, La Digue
North:	Anse Etoile, Beau Vallon, Bel Ombre, Glacis, La Retraite
South:	Anse Royale, Baie Lazare, Takamaka
West:	Anse Boileau, Grand Anse Mahé, La Misère, Port Glaud

3.1.2 A note on the interpretation of the data analysis

Before delving into the results, it is essential to highlight that the values presented in Table 3.1a, as well as in other tables throughout this report, are expressed in terms of Primary Six or P6 pupils. This context is crucial for accurately interpreting the percentages and means. That is, P6 pupils were the units of analysis - even though some variables referred to their teachers, School Heads, or schools. Where a percentage for a variable that describes teachers has been presented, this percentage should be interpreted as 'the stated percentage of P6 pupils taught by teachers having the particular characteristic'. Similarly, a percentage for a variable that describes schools or School Heads should be interpreted as 'the stated percentage of P6 pupils was, in schools or having School Heads, with the particular characteristic'.

3.1.3 Specific policy questions related to pupils and their leaning environment

As a starting point, to guide the data analyses, the first broad educational policy issue identified at the end of Chapter one was transformed into a set of specific questions that would lead to structured responses. These questions have been posed below:

1. What were the age, gender distribution, and pre-school attendance profile of Primary Six pupils?
2. What was the parents' educational background of Primary Six pupils?
3. What were the characteristics of the homes of Primary Six pupils?
4. What was the socio-economic status of Primary Six pupils?
5. What was the situation concerning school location, travel to school, absenteeism, and grade repetition of Primary Six pupils?
6. What were the parent/pupil interactions about schoolwork in the home of Primary Six pupils?
7. To what extent did pupils in Primary Six receive and do homework in the Seychelles?
8. To what extent did pupils in Primary Six have extra tuition in the Seychelles?
9. What were some of the changes from 2013 to 2021 for questions one to eight?

3.2 Personal characteristics of Primary Six pupils

Twelve indicators were derived from the pupil questionnaire to provide information and a measure of the personal characteristics of Primary Six pupils, their parents, and the homes in which they lived. The indicators for the pupils included their age, gender, the number of meals they had per week, the frequency with which they spoke English outside school, and their pre-school attendance record. In terms of indicators for pupils' parents, this included the status of their education and if they were alive. With regards to the pupils' home, the indicators included location where they live, the number of books in their homes, conditions of the house in which they lived and the number of possessions in the home. The last indicator is the socio-economic status of the pupils, and this was derived from the responses to the last four questionnaire items. The Tables below presents information gathered for SEACMEQ V for the six educational regions in Seychelles. Some of these tables also contains information from SACMEQ II, SACMEQ III, and SACMEQ IV for comparative analysis overtime where the possibility presented. The data is presented across the six regions for the past four SACMEQ/SEACMEQ studies.

3.2.1 Age

Table 3.1: Age Distribution of Primary Six pupils

Regions	SEACMEQ V (2021)	SACMEQ IV (2013)	SACMEQ III (2007)	SACMEQ II (2000)
	Age Distribution	Age Distribution	Age Distribution	Age Distribution
	Mean (months)	Mean (months)	Mean (months)	Mean (months)
Central	139.0	137.7	138.5	138.7
East	138.8	137.6	138.6	138.0
Island	138.7	137.7	138.7	139.0
North	138.7	137.1	138.6	139.2
South	139.1	137.7	138.3	138.3
West	138.6	137.0	138.6	139.1
Seychelles	**138.8**	**137.5**	**138.5**	**138.7**

An insight on the age of P6 pupils can provide indication and understanding on their appropriate developmental milestones when engaging with curriculum. The indicator can aid on determining fitted learning and teaching materials to be used, and when to introduce topics and other aspects of the curriculum to pupils (SACMEQ III Report, 2007). In 2021, the mean age of P6 pupils for Seychelles was 138.8 months or about 11.6 years with no variations amongst the regions. From Table 3.1, the average of P6 pupils' age remained consistent for SEACMEQ V (138.8 months), SACMEQ III (138.5 months) and SACMEQ II (138.7 months). Of note, SACMEQ IV (137.5 months) in 2013 recorded a slight decrease. Nonetheless, the results indicate that the age of pupils entering primary education has remained unchanged over the years.

3.2.2 Gender

Table 3.2: Distribution of Primary Six pupils by Gender

Regions	SEACMEQ V (2021)	SACMEQ IV (2013)	SACMEQ III (2007)	SACMEQ II (2000)
	Female Pupils	Female Pupils	Female Pupils	Female Pupils
	%	%	%	%
Central	49.9	53.2	49.8	52.9
East	45.1	45	49.6	48.3
Island	49.7	56.1	48.7	44.6
North	46.7	51.8	45.9	48.4
South	51.1	54.3	51.4	50.2
West	46.4	45	51.4	54
Seychelles	**48.4**	**51.2**	**48.9**	**50.1**

One of the targets of the MoE's Strategic Plan 2021–2024 in Seychelles, which aims to provide equal opportunities for all learners to achieve educational success, is to ensure the equitable distribution of girls and boys in the school system (MoE Strategic Plan, 2022). The data presented in Table 3.2 shows a fairly gender-balanced population in the Primary Six classes from 2000 to 2021. At a closer look, the data indicates a slight decrease in the percentage of P6 girls in 2021 (48.4%) compared to 2013 (51.2%) and 2000 (50.1%). However, the 2021 results (48.9% of female P6 pupils) were relatively closer to SACMEQ III. When compared only to SACMEQ IV the decrease in 2021 was noticeable in the Central (49.9%), Island (49.7%), North (46.7%), and South (51.1%) regions. The West region recorded a slight increase (46.4%), and the East region (45%) remained unchanged. Interestingly, the South region is the only region throughout all SACMEQ/ SEACMEQ studies where the percentage of female P6 pupils remained more than 50 percent.

3.2.3 Meals

Tables 3.3, 3.4 and 3.5 show the percentage of P6 pupils for Seychelles frequently eating breakfast, lunch and supper respectively during a week.

Table 3.3: Frequency of Primary Six pupils eating Breakfast

2021	Not at all	1 or 2 days a Week	3 or 4 days a Week	Everyday of the Week
	%	%	%	%
Central	8.2	10.8	8.0	73.0
East	5.6	13.5	6.0	74.9
Island	3.6	7.7	7.1	81.5
North	12.9	11.0	8.0	68.1
South	6.9	10.7	6.1	76.3
West	9.0	16.5	9.8	64.7
Seychelles	**7.7**	**11.4**	**7.6**	**73.3**

Table 3.4: Frequency of Primary Six pupils eating lunch

2021	Not at all	1 or 2 days a Week	3 or 4 days a Week	Every day of the Week
	%	%	%	%
Central	1.9	5.2	8.8	84.1
East	1.0	6.7	7.6	84.8
Island	1.2	5.4	6.0	87.4
North	4.4	5.7	9.5	80.4
South	1.6	7.8	6.3	84.4
West	3.1	10.9	11.6	74.4
Seychelles	**2.1**	**6.4**	**8.3**	**83.2**

Table 3.5: Frequency of Primary Six pupils eating supper

2021	Not at all	1 or 2 days a Week	3 or 4 days a Week	Every day of the Week
	%	%	%	%
Central	2.8	2.1	5.5	89.6
East	1.0	3.8	3.8	91.4
Island	1.2	4.2	4.8	89.8
North	1.3	3.1	6.9	88.8
South	2.4	5.5	2.4	89.8
West	3.8	4.6	7.7	83.8
Seychelles	**2.1**	**3.4**	**5.2**	**89.2**

Generally, the statistics in Table 3.3, Table 3.4, and Table 3.5 indicate that a large majority of the Primary Six pupils were having three meals per day every day of the week. However, a closer look at the frequency of meals shows that amongst the three meals, breakfast held on average the lowest proportion of pupils at 73.3 percent compared to lunch (83.2%) and supper (89.2%). The results indicate that there are about one fifth (19.1%) of the pupils eating breakfast on a frequency of one or two days a week to not at all, whilst pupils eating lunch and supper on a frequency of one or two days a week to not at all was much lower (8.5% and 5.5% respectively).

Policy Suggestion 3.1: Conduct a study on the pupils in schools who may not be eating breakfast to ensure the establishment and or development of programme for pupils to receive free breakfast at schools.

3.2.4 Speaking English

Table 3.6 shows the percentage of Primary Six pupils who said they spoke English at least sometimes outside of the school context for Seychelles for the past four SACMEQ/SEACMEQ studies. The question was about the frequency that pupils speak English outside school with the option to choose between: 'Never' = 1, 'Sometimes' = 2, 'Most of the time' = 3, and 'All the time' = 4.

Table 3.6: Percentage of P6 pupils who speak English at least sometimes outside the school

Regions	SEACMEQ V (2021)	SACMEQ IV (2013)	SACMEQ III (2007)	SACMEQ II (2000)
	Speak English	Speak English	Speak English	Speak English
	%	%	%	%
Central	56.4	17.1	85.3	85.9
East	65.2	2	82.2	76.9
Island	71.0	0	79.6	88.8
North	59.1	26.6	93	83.3
South	70.7	1.7	86.5	78.7
West	59.7	48	84.2	84
Seychelles	**61.9**	**16.1**	**85.2**	**83.5**

Seychelles has three national languages, Seychellois Creole, English and French (SACMEQ III Report, 2007). However, English is the most frequent language used for official purposes making it more dominant than the other two languages in some context (SACMEQ III Report, 2007). Furthermore, English is also the medium of instruction in schools starting from Primary Three onwards (SACMEQ III Report, 2007). In 2021, from Table 3.6 there is clear indication that about more than half of the pupils on average (61.9%) spoke English at least sometimes outside of school, a remarkable increase compared to SACMEQ IV (16.1%). At the regional level, the highest percentage was recorded in the Island (71.0%) and South (70.7%) regions, while the Central region had the lowest percentage at about 56 percent. On the other hand, the comparison of SEACMEQ V and SACMEQ IV to SACMEQ III and II indicate a considerable decrease were the percentage recorded was about 85 percent in SACMEQ III and 83 percent in SACMEQ II. Generally, "when pupils use the language of instruction outside of school, mainly at home and in the community, this has a positive relationship with learning" (SACMEQ III Report, 2007: 12).

3.2.5 Pre-School

Table 3.7 shows the percentage of Primary Six pupils who said they attended at least two years' pre-school classes before Primary One for Seychelles. The question asked pupils if they attended pre-school, nursery or kindergarten or reception classes before Primary one, and the length of time they had attended. The options were coded as follows:

'I have never attended a pre-school'	= 1
'A few months'	= 2
'One year'	= 3
'Two years'	= 4
'Three or more years'	= 5

Table 3.7: Distribution of Primary Six pupils 'who attended at least two years of preschool'

Regions	**SEACMEQ V** (2021)	**SACMEQ IV** (2013)	**SACMEQ III** (2007)
	Pre-school	**Pre-School**	**Pre-School**
	%	**%**	**%**
Central	87.9	78	96.1
East	76.5	75	97.2
Island	81.6	89.7	99.5
North	75.0	83.1	98.6
South	82.7	81.3	89.3
West	76.6	83	94.4
Seychelles	**81.8**	**81**	**96**

The results from Table 3.7 showed that on average, 81.8% of Primary Six pupils claimed that they attended at least two years of pre-school. The results from 2021 remained consistent with those of SACMEQ IV (81%); however, a decline was observed when compared to SACMEQ III (96%). At the regional level in 2021, the Central region recorded the highest percentage (87.9%) of pupils, while the North region recorded the lowest percentage (75%). Although pre-school was not compulsory in Seychelles, it was strongly encouraged by the Ministry of Education through the Institute of Early Childhood Development (IECD). As such, in Seychelles, the government pre-school was structured and managed by a primary school. Furthermore, it was "expected that pupils will enter primary schools directly after completion of the second year of pre-schooling" (SACMEQ III Report, 2007: 13).

3.2.6 Parents' Education

Table 3.8 displays the results of Primary Six pupils' parental highest level of education for Seychelles for the SEACMEQ V Study. The pupils had to choose between twelve options which were coded as follows:

'Did not go to school and had no adult education'	= 1
'Did not go to school and had some adult education'	= 2
'Completed some primary education'	= 3
'Completed all primary education'	= 4
'Completed some education/training after primary education'	= 5
'Completed some secondary education'	= 6
'Completed all of secondary education'	= 7
'Completed some education/training after secondary education'	= 8
'Completed some university education	= 9
'Completed a university degree'	= 10
'I do not know'	= 11
'I do not have a mother, father or male guardian'	= 12

Table 3.8: Distribution of Primary Six pupils by mother and father education level

Level of Education	%
'Did not go to school and had no adult education'	1.3
'Did not go to school and had some adult education'	0.6
'Completed some primary education'	1.7
'Completed all primary education'	5.8
'Completed some education/training after primary education'	1.6
'Completed some secondary education'	7.4
'Completed all of secondary education'	28.0
'Completed some education/training after secondary education'	28.3
'Completed some university education	8.7
'Completed a university degree'	13.1
'I do not know'	3.6

"Parental education has been identified as a key component of the socio-economic status of pupils. It is an important factor in the achievement level of children since it is assumed that parents with a high level of education will tend to create more conducive learning environment in the home" (SACMEQ III Report, 2007: 14). In general, results in Table 3.8 indicate that most pupils have both parents who completed some education/ training after secondary education (28.3%), followed

by completed at least all secondary education (28%), and completed a university degree (13.1%). Some similar trends were observed in SACMEQ III and SACMEQ IV whereby the overall results indicated that most pupils have parents who both completed all primary and secondary education.

3.2.7 Where Pupil Live

Table 3.9 contains the percentage of Primary six pupils with reference to where they stayed during the school week specifically pupils who said 'In a home with my family/relatives'. They had to choose between five options coded as follows:

'In a home with my family/relatives'	= 1
'In a house with other people who are not members of my family'	= 2
'In a hostel/boarding school accommodation'	= 3
'In an orphanage or children's home'	= 4
'Other'	= 5

Table 3.9: Distribution of Primary Six pupils who live with family or relatives during the school week

Regions	SEACMEQ V (2021)	SACMEQ IV (2013)	SACMEQ III (2007)	SACMEQ II (2000)
	Lives with family/relatives	Lives with family/relatives	Lives with family/relatives	Lives with family/relatives
	%	%	%	%
Central	95.9	97	98.6	97.1
East	95.6	97	98.5	96.1
Island	97.0	98.4	99.6	96.8
North	95.8	98.4	98.6	98
South	94.7	100	98.9	97.3
West	97.1	94	95.4	97
Seychelles	**96.0**	**97.4**	**98.2**	**97.1**

"The family circumstance in which the pupils live will also have an influence on how they cope with learning at school. Unstable family situation may interfere with pupil's learning and may lead to anti-learning behaviour" (SACMEQ III Report, 2007: 15). In 2021, although Seychelles recorded a slight decrease compared to the SACMEQ studies, the results have remained rather consistent throughout. Overall, the largest majority of Primary Six pupils stated that on average they lived with family or relatives, 96 percent in 2021, 97.4 percent in 2013, 98.2 percent in 2007, and 97.1 percent in 2000.

3.2.8 Books at Home

Table 3.10 contains the mean value of the number of books that pupils said they had where they stayed during the school week for SEACMEQ V, not counting the newspapers, magazines and books that they use in school.

Table 3.10: Number of books at Primary Six pupils' home

Regions	SEACMEQ V (2021)
	Number of books at home (Mean)
Central	40.4
East	22.7
Island	27.5
North	50.2
South	27.6
West	40
Seychelles	**35.6**

Location	Number of books at home (Mean)
Rural	28.9
Urban	41.6
Seychelles	**35.6**

SES	Number of books at home (Mean)
Low SES	22.9
High SES	45.8
Seychelles	**35.6**

The number of books available in the home of the pupils is an indicator of the quality of the learning environment and achievement in reading of pupils. Overall, from Table 3.10 the average number of books recorded at pupils' homes totalled to a value of 35.6, with the North region recording the highest mean value of 50.2 and the East region the lowest at 22.7. Further to the findings above, there was an apparent difference in the mean value in the categories of location and socio-economic status. Pupils in the rural areas had a lower mean value (28.9) for the number of books at home than pupils in the urban areas (41.6). The pupils from the Lower SES group recorded a lower mean value (22.9) in number of books at home compared to the pupils in High SES group (45.8).

Policy Suggestion 3.2: The Ministry of Education may need to:

(a) Provide funding for educational materials and promote digital resources like e-books to help bridge the gap and improve overall educational outcomes.

(b) Raise parents' awareness about the importance of reading and their engagement.

3.2.9 Home Conditions

Table 3.11 shows the percentage of pupils who identified the following in their homes; source of lighting, the type of flooring in the home, and the materials used to build the outside wall and the roof respectively.

Table 3.11: Distribution of Primary Six pupils by source of light for studying at home

Regions	No lighting	Fire/ Candle lighting	Paraffin/ oil/ gas lamp	Electric lighting
	%	%	%	%
Central	0.6	0.8	1.2	97.3
East	1.3	2.2	1.3	95.1
Island	0.0	1.2	0.0	98.8
North	0.6	0.6	1.2	97.6
South	0.8	0.8	0.0	98.5
West	0.0	2.2	0.0	97.8
Seychelles	**0.6**	**1.2**	**0.8**	**97.3**

Table 3.12: Distribution of Primary Six pupils by floor cover at place of stay

Regions	Earth/ Canvas	Wood	Cement	Carpet/ tiles
	%	%	%	%
Central	1.8	3.3	5.5	89.3
East	2.7	2.2	5.4	89.7
Island	1.2	1.8	6.0	91.1
North	1.2	6.1	8.5	84.2
South	0.8	2.3	3.1	93.8
West	0.7	3.7	6.7	88.9
Seychelles	**1.6**	**3.2**	**5.8**	**89.4**

Table 3.13: Distribution of Primary Six pupils by wall cover at place of stay

Regions	Cardboard/ Grass	Sticks/ Stones and mud	Metal/ asbestos sheet/ wood	Cut stones/ concrete blocks/ bricks
	%	%	%	%
Central	2.7	8.2	3.9	85.2
East	3.8	5.2	9.4	81.7
Island	0.6	3.6	15.4	80.5
North	1.9	6.2	9.3	82.6
South	3.0	2.3	7.6	87.1
West	2.3	10.5	13.5	73.7
Seychelles	**2.5**	**6.5**	**8.4**	**82.7**

Table 3.14: Distribution of Primary Six pupils by roof cover at place of stay

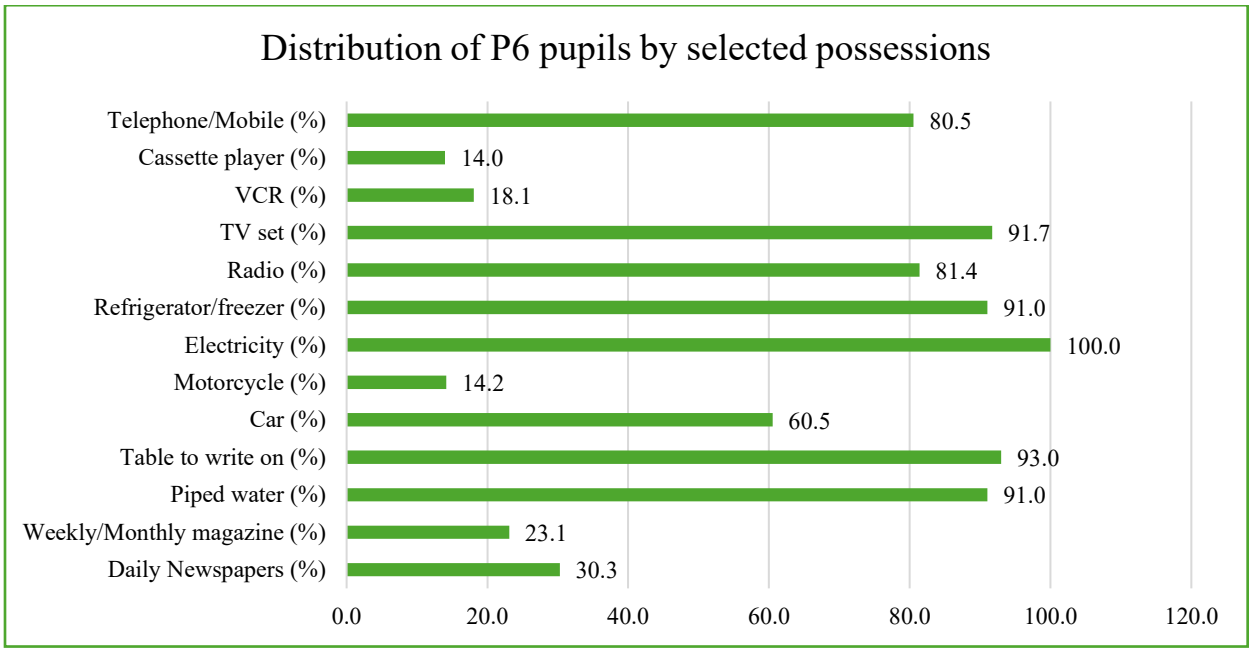
Regions	Cardboard/ Plastic/ Canvas sheet	Grass thatch or mud	Metal/ asbestos sheets	Cut stones/ concrete/ tiles
	%	%	%	%
Central	3.1	1.2	76.1	19.5
East	3.6	0.5	71.4	24.5
Island	3.0	1.2	87.5	8.3
North	1.2	1.2	78.3	19.3
South	4.6	0.0	83.2	12.2
West	3.0	0.0	85.0	12.0
Seychelles	**3.1**	**0.8**	**78.7**	**17.4**

The 'Home conditions' indicator gives an insight on the physical quality of the Primary Six pupils' home which can provide to some extent an understanding on the learning environment of the pupils. The figures in the tables above, overall indicate fairly good housing conditions in Seychelles. Most pupils on average claimed their houses have electricity (97.3%), carpet/ tiled floor (89.4%), cut stones/ concrete blocks/ bricks walls (82.7%), and metal/ asbestos sheets roofing (78.7%).

3.2.10 Home Possessions

Figure 3.1 displays the percentage of P6 pupils in the SEACMEQ V study who identified the following material possessions and amenities in their homes: daily newspaper, weekly or monthly magazine, radio, TV set, video cassette recorder, cassette player, telephone/mobile, refrigerator/freezer, motorcycle, car, piped water, electricity (mains, generator, solar) and table to write on.

Figure 3.1:



The 'Home possession' indicator is used as a measure for wealth by material possessions in the pupils' home. Out of 31 items from the questions on material possessions and amenities, only thirteen items were used. Out of the thirteen items, more than half of the pupils claimed that they possessed the following eight items in their homes: electricity (100%), table to write on (93%), TV set (91.7%), refrigerator/ freezer (91%), piped water (91%), radio (81.4%), telephone/ mobile (80.5%), car (60.5%). The results indicate that in Seychelles, most pupils possessed most of the material possessions and amenities in their homes.

3.3 School-level factors experienced by pupils

A total of eight indicators was derived from the SEACMEQ/SACMEQ studies to provide information on school-level factors experienced by pupils which may be related to pupils learning and schooling experiences and achievements. The indicators included school location, absenteeism, grade repetition, homework given, homework corrected and explained, homework help at home, travel distance to school, and extra tuition. Table 3.15 through to Table 3.23 present information gathered for SEACMEQ V for the six educational regions in Seychelles. Some of these tables also contain information from SACMEQ II, SACMEQ III, and SACMEQ IV for comparative analysis overtime where the possibility presented.

3.3.1 School Location

School heads were asked to describe their school location choosing one from three options with the following coding: 'Isolated = 1', 'Rural = 2', 'In or near a small town' = 3. Table 3.15 contains the percentage of school heads that said their school location where either 'in or near a small town' for Seychelles for the past four SEACMEQ/SACMEQ studies.

Table 3.15: Distribution of primary schools in or near a small town

Regions	SEACMEQ V (2021)	SACMEQ IV (2013)	SACMEQ III (2007)	SACMEQ II (2000)
	%	%	%	%
Central	100	100	100	100
East	0	0	45.6	100
Island	35	0	70.1	100
North	40	17.4	81.7	100
South	0	0	57.3	50.5
West	61	26	10.6	12
Seychelles	**53**	**38.6**	**69**	**83.9**

The data gathered in SEACMEQ V from Table 3.15 show that slightly more than half (53%) of the schools are located in or near an urban area. The results were varied regionally, with Central recording the larger percentage of schools (100%). Results from Table 3.15 show considerable differences in the percentage over the period of the four SACMEQ/ SEACMEQ studies. However, it is important to note that Seychelles is a small country and distances between rural and urban areas are not so great. Therefore, it is more likely that the definition of rural and urban might have been interpreted differently by the school heads (SACMEQ III Report, 2007).

3.3.2 Days absent and reason for absences

Table 3.16 shows the mean value of the number of days that pupils were absent from school and the percentage of pupils who were absent due to illness.

Table 3.16: Distribution of Primary Six pupils by reason for absence

Regions	SEACMEQ V (2021)		SACMEQ IV (2013)		SACMEQ III (2007)	
	Days absent from school (Mean)	Reason due to illness %	Days absent from school (Mean)	Reason due to illness %	Days absent from school (Mean)	Reason due to illness %
Central	1.0	79.1	0.88	88.3	1.35	81.5
East	2.0	89.9	0.86	87.3	1.75	87.4
Island	0.7	85.2	0.77	69.4	2.05	88.7
North	1.6	82.5	0.9	82.7	1.82	83.2
South	2.7	84.5	0.84	66.5	1.78	91.3
West	1.3	88.4	1.12	86.2	1.99	79.8
Seychelles	**1.4**	**84.1**	**0.89**	**81.9**	**1.7**	**84.6**

According to Table3.2b, on average, Primary Six pupils in the Seychelles were absent at least once (1.4 days) for SEAMCEQ V. This reflects a slight increase from SACMEQ IV (0.89 days) but a decrease compared to SACMEQ III, (1.7 days). For SEACMEQ V, pupils in the South region experienced the highest absenteeism rate (2.7 days), which was also observed to be the highest number of days in a given region in all the reporting SACMEQ studies. Those in the East region followed (2.0 days) while the lowest rate was recorded on the Island (0.7 days). The findings suggest that there may be a need for further investigation into the specific high level of school absenteeism in the South region to establish whether the absences occur on consecutive days, before it becomes a matter of "absenteeism of concern," as stipulated in the Whole School Behavior Management Policy (2010) regarding "absence for more than 3 consecutive school days." Notably, the challenges posed by the COVID-19 pandemic and ongoing cases in 2020 could have been a possible explanation for the rise. Further analysis reveals that more than three-quarters of the time, absenteeism across the past three SACMEQ studies (84.1% in 2021, 81.9% in 2013, and 84.6% in 2007), was due to illness. In 2021, the East region had the highest proportion of Primary Six pupils absent due to illness (89.9%) while the Central region had the lowest (79.1%).

3.3.3 Grade Repetition

Pupils were asked about the number of times they had repeated a primary grade since they started school including Primary Six. They had to choose between four options: 'I have never repeated' = 1, 'I have repeated once' = 2, 'I have repeated twice' = 3, 'I have repeated three or more times' = 4. Table3.17 contains the percentage of Primary Six pupils who said they repeated grade six at least once for Seychelles.

Table 3.17: Distribution of Primary Six pupils by frequency of grade repetition

Regions	SEACMEQ V (2021)	SACMEQ IV (2013)	SACMEQ III (2007)	SACMEQ II (2000)
	Repeated at least once	Repeated at least once	Repeated at least once	Repeated at least once
	%	%	%	%
Central	2.5	1.8	3.3	13.2
East	2.7	2	0.9	5.9
Island	1.8	1.2	3.6	8.1
North	4.3	0.5	0	9.9
South	1.5	0.9	1.7	10.9
West	2.9	1	2	9
Seychelles	**2.6**	**1.2**	**2.2**	**10.3**

The results for grade repetition in Seychelles, summarized in Table3.17, show a slight increase in the percentage of Primary Six pupils repeating grades at least once in SEACMEQ V compared to SACMEQ III and IV respectively: 2.6 percent in SEACMEQ V compared to 2.2 percent in SACMEQ III and 1.2 percent in SACMEQ IV. Notably, the highest percentage occurred in SACMEQ II at 10.3 percent. Considering the introduction of the Grade Repetition Policy, it is advisable to closely monitor grade repetition trends in the coming years due to its potential impact on achieving quality and desirable educational outcomes. A closer look at the regional level for SEACMEQ V indicates that the North region had the highest rate of repetition at 4.3 percent, whereas the lowest rates were observed on the Island (1.8%) and in the South (1.5%) regions.

3.3.4 Homework given

Table3.18 contains the percentage of Primary Six pupils who said they received homework 'most days of the week' for the past four SACMEQ/ SEACMEQ studies. The question asked pupils how often they were usually given homework. They had to choose between four options: 'I do not get homework' = 1, 'Once or twice each month' = 2, 'Once or twice each week' = 3, 'Most days of the week' = 4.

Table 3.18: Distribution of Primary Six pupils who are given homework 'most days of the week'

Regions	SEACMEQ V (2021)	SACMEQ IV (2013)	SACMEQ III (2007)	SACMEQ II (2000)
	%	%	%	%
Central	69.9	81.3	86.3	62.5
East	67.9	85	95.1	38.4
Island	72.3	86.5	84.7	52.5
North	69.4	76.9	100	68.5
South	75.2	86.6	96.6	51.7
West	73.5	78	94.3	53
Seychelles	**70.7**	**82.1**	**91.6**	**59.3**

In SEACMEQ V, about 70 percent of pupils overall reported that they received homework 'most days of the week'. The South region recorded the largest percent of pupils (75.2%) and the East region the lowest percent (67.9%). The results in SEACMEQ V in comparison to the past SACMEQ III and II studies indicate a decrease in the percentage of pupils receiving homework from their teachers. In Seychelles, most of the government schools follow their own practices and guidelines about homework. However, it remains to be determined to what extent these practices are standardized across all schools and aligned to the MoE's policy on Homework.

3.3.5 Homework corrected and explained

Table 3.19 contains the percentage of Primary six pupils who said their teacher corrected and explained their homework 'most of the time' to 'always'.

Table 3.19: Distribution of Primary Six pupils whose homework is corrected at least 'most of the time' by the teachers

Regions	SEACMEQ V (2021)	SACMEQ IV (2013)	SACMEQ III (2007)
	%	%	%
Central	83.9	87.4	75.9
East	86.6	90	94.7
Island	97.0	93.9	97.5
North	82.0	91.6	96.3
South	81.3	91.7	96.6
West	89.0	89	82
Seychelles	**86.1**	**90**	**87.6**

Table 3.20: Distribution of Primary Six pupils whose homework is explained at least 'most of the time' by the teachers

Regions	SEACMEQ V (2021)	SACMEQ IV (2013)	SACMEQ III (2007)
	%	%	%
Central	72.7	72.6	50.8
East	64.6	62	51.8
Island	75.3	77.4	60.6
North	68.5	63.5	68
South	58.1	82.8	82.6
West	66.9	58	71.8
Seychelles	**69.1**	**69.6**	**61.3**

In SEACMEQ V, about 86 percent of pupils reported that their homework was corrected most of the time or always. The highest was recorded in the Island region (97%) and the lowest in the South region (81.3%). Although the SEACMEQ V recorded a decrease in percentage compared to SACMEQ IV (90%), overall, for the past three studies the results have remained consistently high. The data show a consistent pattern in the Island region maintaining the highest percentage compared to other regions. On the other hand, the results for pupils who said their teachers explained answers to homework show a lower percentage of pupils. On average in SEACMEQ V, about 69 percent of the Primary Six pupils said teachers explained the answers to homework. The Island region recorded the highest percentage (75.3%) and the South region the lowest (58.1%).

3.3.6 Homework help at home

Table 3.21 contains the percentage of pupils that said they received help with their homework 'Most of the time' for Seychelles. They had to choose between four options: 'I do not get homework' = 1, 'Never' = 2, 'Sometimes' = 3, 'Most of the time' = 4.

Table 3.21: Distribution of Primary Six pupils who get help with homework 'most of the time' by a person at home

Regions	SEACMEQ V (2021)	SACMEQ IV (2013)	SACMEQ III (2007)	SACMEQ II (2000)
	%	%	%	%
Central	35.3	34.7	36.6	29.7
East	47.5	41	41	37.9
Island	27.4	42.9	48.3	28.5
North	45.1	42.4	40.3	44.3
South	27.7	31.5	39.7	22.3
West	38.0	41	45.7	29
Seychelles	**37.1**	**38.3**	**40.9**	**32.2**

Table 3.21 above gives an indicator of the percentage of pupils who receive parental support with homework. On average in SEACMEQ V, about 37 percent of pupils claimed that they received help with homework 'most of the time' at home. The percentage varied across the regions with the East region recording the highest percentage (47.5%) of pupils receiving help with homework. However, the lowest percentage of pupils was recorded in the Island and South regions at about 27 percent. When comparing the figures throughout the past four studies, overall, the percentage of pupils who claimed that they received help with homework at home remained consistent from SACMEQ III to SEACMEQ V with slight percentage variation between 2.6 percent to 3.89 percent. Notably, the 2000 study showed the lowest percentage of pupils receiving help with homework approximately 32 percent, compared to the other three studies.

Policy Suggestion 3.3: The Ministry of Education should:

1. Review the 2003 Homework Policy to:
   (a) Ensure its relevance and effective implementation across schools.
   (b) Include provisions for teachers to provide feedback on homework as part of their planning process.
2. Establish support mechanisms for monitoring and communication to ensure schools comply with the updated policy; and
3. Establish mechanisms to encourage and support parents' involvement in their children education.

3.3.7 Travel distance to school

Table 3.22 contains the percentage of Primary six pupils who travel to school within the distance of 3.5 kilometres. The question asked pupils how far they travel each day to school, and they had to choose from eight options:

'0 to 0.5 kilometres (zero to half a kilometre)' = 1
'Over 0.5 kilometres but not more than 1 kilometre' = 2
'Over 1 kilometre but not more than 1.5 kilometres' = 3
'Over 1.5 kilometres but not more than 2 kilometres' = 4
'Over 2 kilometres but not more than 2.5 kilometres' = 5
'Over 2.5 kilometre but not more than 3 kilometres' = 6
'Over 3 kilometres but not more than 3.5 kilometres' = 7
'Over 3.5 kilometres but not more than 4 kilometres' = 8

Table 3.22: Distribution of Primary Six pupils who travel 3.5km or less to school daily

Regions	SEACMEQ V (2021)	SACMEQ IV (2013)	SACMEQ III (2007)
	%	%	%
Central	74.4	73.6	76.5
East	85.5	78	88.9
Island	84.4	83.9	85.2
North	80.0	74.8	88.6
South	81.4	84.2	65
West	84.8	88	71.9
Seychelles	**80.1**	**78.9**	**79.2**

The data gathered in SEACMEQ V from Table3.22 show that a large majority of the Primary Six pupils (80.1%) stayed within the 3.5 kilometres radius of the school. Overall, the figures remained consistent for the past three studies a reasonable indication that pupils are travelling in reasonable distance to their school. It is worth noting that 'the Ministry of Education operates a "zoning system" and except for the private schools, pupils in general attend school in the district where they reside. In exceptional cases pupils are exempted from "zoning" and the parents have to make their own arrangements for transport for their children' (SACMEQ III Report, 2007: 24).

3.3.8 Extra tuition

Table 3.23 contains the percentage of pupils who claimed that they take extra tuition and the percentage of pupils who said the lessons were paid for. The question asked pupils if they take extra/remedial lessons in school subjects outside lesson hours, and if there were any special payment made to the person who gives these extra / remedial lessons.

Table 3.23: Percentages of Primary Six pupils taking extra tuition and paying for it

Regions	**SEACMEQ V** (2021)	
	Taking Extra Tuition	**Payment**
	%	**%**
Central	39.8	58.3
East	39.6	38
Island	45.2	25.7
North	54.6	33
South	35.3	23.3
West	55.1	27
Seychelles	**43.4**	**39.7**

In general, about two fifths (43.4%) of the Primary Six pupils said they had extra tuition and about the same proportion (39.7%) claimed that the lessons were paid for. Most pupils taking extra tuition were in the West (55.1%) and North (54.6%) regions while the Central region recorded the highest percentage of pupils (58.3%) paying for extra tuition. On the other hand, the South region recorded the lowest proportion of pupils (35.3%) taking and paying for extra tuition.

Conclusion

In SEACMEQ V, the mean age of pupils for Seychelles was 138.8 months or about 11.6 years with no variations amongst the regions and past four SEACMEQ/SACMEQ studies.

The distribution of Primary Six pupils by gender decreased from 51.2 percent of girls in SACMEQ IV to 48.4 percent in SEACMEQ V. Nonetheless, overall, there was a fairly gender-balanced population in the Primary Six classes from SACMEQ II to SEACMEQ V in Seychelles.

For the frequency of meals in SEACMEQ V, breakfast held on average the lowest proportion of pupils at 73.3 percent (compared to lunch at 83.2% and supper at 89.2%). On the other hand, the comparison to SACMEQ III and II indicate considerable decrease overtime were the percentage recorded was about 85 percent in SACMEQ III and 83 percent in SACMEQ II.

Analysis of pre-school attendance trends from the last three SACMEQ studies reveals a fluctuating pattern, with a decline observed over time. The data indicates that the proportion of Primary Six pupils who attended at least two years of pre-school was 96% in SACMEQ III, remained consistent at 81% in SACMEQ IV, and stood at 81.8% in SACMEQ V. While the figures from SACMEQ IV to SACMEQ V show stability, the overall trend reflects a decrease compared to SACMEQ III.

In SEACMEQ V, most pupils have both parents who completed at least all of secondary education (28%), completed some education/ training after secondary education (28.3%), and completed a university degree (13.1%).

A total of 96 percent of pupils stated they lived with family or relatives in SEACMEQ V, showing a slight decrease from SACMEQ IV (97.4%), SACMEQ III (98.2%) , and SACMEQ II (97.1%).

The average number of books recorded at pupils' homes in SEACMEQ V totalled to a mean value of 35.6, with the North region recording the highest mean value of 50.2 and East region the lowest mean value at 22.7.

Overall, in SEACMEQ V, the Primary Six pupils were absent at least once (1.4 days), a slight increase from SACMEQ IV (0.89 days) but a slight decrease compared to SACMEQ III, which stood at 1.7 days. Across the past three reporting years, over 75 percent of the time (84.1% in SACMEQ V, 81.9% in SACMEQ IV, and 84.6% in SACMEQ III), the main reason for the absenteeism was due to illness.

The percentage of Primary Six pupils repeating grades at least once was increased from 1.2 percent in SACMEQ IV to 2.6 percent in SEACMEQ V.

Looking at the trends in correction of homework for SEACMEQ V, about 86 percent of pupils reported that their homework was corrected most of the time or always. The highest figure was recorded in the Island region (97%) and the lowest in South region (81.3%).

SEACMEQ V recorded a total of 80.1 percent of Primary Six pupils travelling within the 3.5 kilometres radius of the school.

For pupils taking extra tuition, about two fifths (43.4%) of the Primary Six pupils said they had extra tuition while two fifths (39.7%) of the pupils said that the lessons were paid for.

Chapter 4: Characteristics of Teachers and their Classrooms

4.1 Introduction

Characteristics of teachers are important determinants of student achievement (Brewer & Pelayo, 2020). In this chapter, selected background characteristics of P6 reading, mathematics, and health/life skills teachers, segregated by the six education regions for 2021, are explored. Personal and professional characteristics of teachers and some aspects of the management of their teaching environment are analysed and comparison where possible, made between the SACMEQ II, III and IV Projects to measure significant trends and changes, in teacher quality which would need the attention of policy makers. The following specific questions related to background characteristics of teachers were posed:

1. (a) What were the average ages of teachers who taught P6 pupils reading, mathematics and health/life skills in Seychelles?
1. (b) What percentages of P6 pupils were taught reading, mathematics and health/life skills by female and male teachers in Seychelles?
2. What was the distribution of P6 pupils among reading, mathematics and health/life skills teachers with specified academic qualifications?
3. What was the distribution of P6 pupils among reading, mathematics and health/life skills teachers based on their number of years of teacher training and teaching experience?
4. What was the distribution of P6 pupils based on the in-service courses attended by their teachers, and their effectiveness ratings in improving teaching practices?
5. How were P6 pupils distributed among teachers based on the number of hours per week they spent on teaching, lesson preparation and marking?
6. What was the distribution of P6 pupils to their subject teachers (reading, mathematics and health/life skills) who visit the Resource Centre for a stated reason?
7. How are P6 pupils distributed to their subject teachers by how often they ask parents to sign homework?
8. What were the changes in the distribution of P6 pupils among teachers of reading, mathematics and health/life skills from 2007 to 2021?

4.2 Personal characteristics of teachers

The indicators to measure personal characteristics, specifically age and gender, are presented below and compared across four reporting years (2000, 2007, 2013 and 2021).

4.2.1 Age

Table 4.1: Mean age of P6 reading, mathematics, and health/life skills teachers by region

Regions	SEACMEQ V (2021)			SACMEQ IV (2013)			SACMEQ III (2007)			SACMEQ II (2000)		
	Reading Mean	Maths Mean	Health Mean	Reading Mean	Maths Mean	Health Mean	Reading Mean	Maths Mean	Health Mean	Reading Mean	Maths Mean	Health Mean
Central	40.8	44.0	41.9	35.3	41.1	47.6	37.6	37.1	38.5	40.7	30.8	N/A
East	46.0	46.1	44.7	41.9	34.1	37.4	36.8	34.0	43.3	44.4	41.8	N/A
Island	38.5	41.3	40.5	33.3	40.6	36.4	36.2	35.1	33.6	30.4	33.2	N/A
North	36.9	44.7	39.5	34.6	33.5	33.8	33.8	30.3	36.0	34.2	30.5	N/A
South	39.3	41.2	37.3	35.0	39.8	44.2	32.2	33.9	37.1	41.2	27.5	N/A
West	34.2	32.9	50.0	43.5	32.9	44.1	39.4	32.0	44.1	36.5	29.3	N/A
Seychelles	**40.4**	**42.8**	**41.5**	**36.7**	**37.7**	**41.7**	**36.3**	**34.4**	**38.7**	**38.5**	**31.9**	**N/A**

The majority of P6 pupils in Seychelles were taught by teachers whose average ages were 40.4 years for reading, 42.8 years for mathematics, and 41.5 years for health/life skills. This is concerning, as it is the first time in SACMEQ history that the average age of teachers across all three subjects exceeded 40 years, reflecting a broader trend of an aging teaching workforce. For instance, in 2013, only health/life skills teachers for P6 pupils had an average age above 40 years (41.7 years), while reading and mathematics teachers were younger, at 36.7 and 37.7 years, respectively. Earlier data from 2007 and 2000 show even younger ages, with reading, mathematics and health/life skills teachers all below 40 years (in 2007: reading 36.3 years, mathematics 34.4 years and health/life skills 38.4 years, while in 2000: reading 38.5 years and mathematics 31.9 years). The health test was not administered in 2000.

Between 2013 and 2021, P6 pupils in Seychelles were increasingly likely to be taught by older reading teachers, with the average age rising by approximately 4 years, from 36.7 years to 40.4 years. This upward trend was consistent across most regions except the West region. The Central region showed the largest increase of 5.5 years, followed by the Island region with an increase of about 5 years. However, in the West region, P6 pupils experienced a notable shift, as the average age of their reading teachers decreased by approximately 10 years. A similar pattern was observed for mathematics teachers, with P6 pupils in all regions except the West being taught by older teachers, where the average age remained at 32.9 years. The East region recorded the highest

increase in average age (12 years), followed by the North region (11 years). Data from 2000 highlights how P6 pupils in the South and West regions were taught by younger mathematics teachers (27.5 years and 29.3 years, respectively), compared to 2021, when the lowest average age was 37.3 years in the South region. Health/life skills teachers also followed this trend, with P6 pupils across the East, Islands, North and West regions being taught by older teachers over time.

These results indicate that trends observed in previous SACMEQ reporting years persisted in 2021, with P6 pupils increasingly taught by an aging workforce in reading, mathematics and health/life skills. The Ministry of Education (MoE) acknowledges this as part of both global and national trends, recognizing that teacher shortages undermine the quality of education, a concern highlighted by UNESCO in many countries. To address this, "Teacher Recruitment, Deployment, Development and Retention" was identified as one of the 13 priority areas in the MoE's Education Sector Medium-Term Strategic Plan (MTS) (2013-2017 and beyond), and this priority was maintained in the Medium-Term Strategic Plan (2018-2022) due to its ongoing importance (Teacher Management and Development (TMD) Situational Analysis (2019); TMD Policy, (2020).

Key strategies outlined in the MTS included the launch of an Aspiring Teacher Programme in October 2015, which was revamped in October 2018, as well as the reform of Teacher Management and Development, a three-year Teacher and Management Action Plan (2015-2017), the Task Force Report (2017) and the Teacher Management and Development Policy (2020). These initiatives articulated clear challenges and recommendations for further implementation.

However, despite these efforts, the data suggests that the problem persists, with insufficient implementation and monitoring of recommended strategies. A significant challenge remains the lack of coordinated and systematic mechanisms to ensure cohesive action and systematic implementation of the various recommendations and action plans, as well as the failure to institutionalize the Aspiring Teacher Programme within education institutions (Teacher Management and Development Policy, 2020).

4.2.2 Gender

Figure 4.1 illustrates the distribution of P6 pupils to their subject teachers by teacher gender, and Table 4.2 presents the distribution by region as well. The data from 2021, 2013, and 2007 reveal several key trends.

Figure: 4.1 Distribution of P6 pupils over time to reading, mathematics, and health/life skills teachers by teacher gender

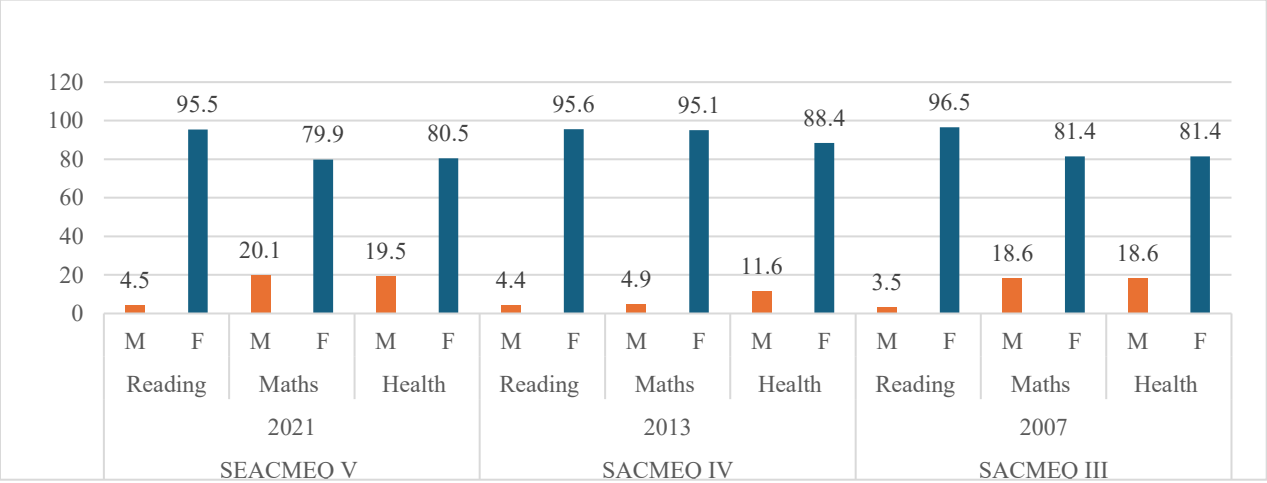


Table 4.2 Distribution of P6 pupils over time to reading, mathematics, and health/life skills teachers by teacher gender and region

Regions	SEACMEQ V (2021)						SACMEQ IV (2013)						SACMEQ III (2007)			
	Reading		Maths		Health		Reading		Maths		Health		Reading		Maths	
	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)
Central	7.2	92.8	7.0	93.0	13.4	86.6	4.9	95.1	2.7	97.3	19.8	80.2	0	100	0	100
East	0.0	100.0	29.0	71.0	0.0	100.0	0	100	0	100	0	100	0	100	24.8	75.2
Island	12.3	87.7	56.4	43.6	12.4	87.6	19	81	0	100	0	100	0	100	11.8	88.2
North	0.0	100.0	13.1	86.9	0.0	100.0	0	100	0	100	0	100	24.2	75.8	0	100
South	0.0	100.0	19.2	80.8	60.8	39.2	0	100	18.3	81.7	44.1	55.9	0	100	0	100
West	0.0	100.0	19.8	80.2	66.4	33.6	0	100	14.9	85.1	0	100	0	100	38.9	61.1
Seychelles	**4.5**	**95.5**	**20.1**	**79.9**	**19.5**	**80.5**	**4.4**	**95.6**	**4.9**	**95.1**	**11.6**	**88.4**	**3.5**	**96.5**	**18.6**	**81.4**

Figure 4.1 indicates that 95 percent of Primary Six pupils in Seychelles are consistently being taught reading by female teachers across all reporting years (95.5% in both 2021 and 2013 and 96.5% in 2007). This demonstrates a strong and consistent dominance of female teachers in delivering reading instruction to Primary Six pupils. There has been a slight improvement in

achieving gender parity in the distribution of mathematics teachers between 2013 and 2021. In 2021, about 20.1 percent of Primary Six pupils were taught mathematics by male teachers, compared to less than 5 percent in 2013. This represents a significant improvement, and the highest proportion of male mathematics teachers recorded in the past three reporting years which can be attributed to the recruitment of expatriates in primary schools. Of note in 2020, there were 14 male expatriates in primary schools and 10 in 2021. The figures in 2021 were closer to the trends observed in 2007, where male participation in mathematics and health subjects was about 20 percent, compared to the drop observed in 2013 (Maths 4.9% and English 11.6%).

A detailed examination of regional data in Table 4.2 reveals that from 2013 to 2021, the gender distribution trends in reading instruction remained consistent, with no male teachers delivering reading to Primary Six pupils in the East, North, South and West regions. However, the Island region consistently had a higher percentage of male reading teachers. For Mathematics, there was a significant improvement in the percentage of male teachers across all regions. The Island region experienced the most substantial rise, from 0 percent in 2013 to 56.4 percent in 2021. Similarly, the East region increased to 29 percent and the North region to 13 percent in 2021. Female teachers continue to dominate health education, though the West region saw an increase in male health teachers from 0 percent in 2013 to 66.4 percent in 2021, while the South region increased from 44.1 percent to 60.8 percent.

The improvement in male participation since 2013, reaching a level slightly higher than in 2007, is commendable. Nevertheless, the general underrepresentation of male teachers remains a concern. This issue has drawn attention in several developed countries, such as England and Australia. Some experts suggest that the absence of male figures in primary classrooms could contribute to the widening gender performance gap favouring girls or the early disengagement of boys, with consequences extending beyond the classroom and impacting society (United Nations, 2020). This concern is particularly relevant in the context of Seychelles, where the underperformance of boys remains a challenge (Medium Strategic Plan 2018-2022). Therefore, an organized marketing campaign must include specific objectives and strategies to attract, recruit and retain male teachers to address this imbalance.

Policy Suggestion 4.1:

Enhance Teacher Development, Deployment, and Retention to promote and revalorize the teaching profession while ensuring equitable deployment and professional growth of teachers.

4.1.1 Strengthen the Implementation of the Teacher Management and Development Policy

4.1.2 Develop a Comprehensive Staff Deployment Guidelines

4.1.3 Strengthen Teacher Training and Professional Development

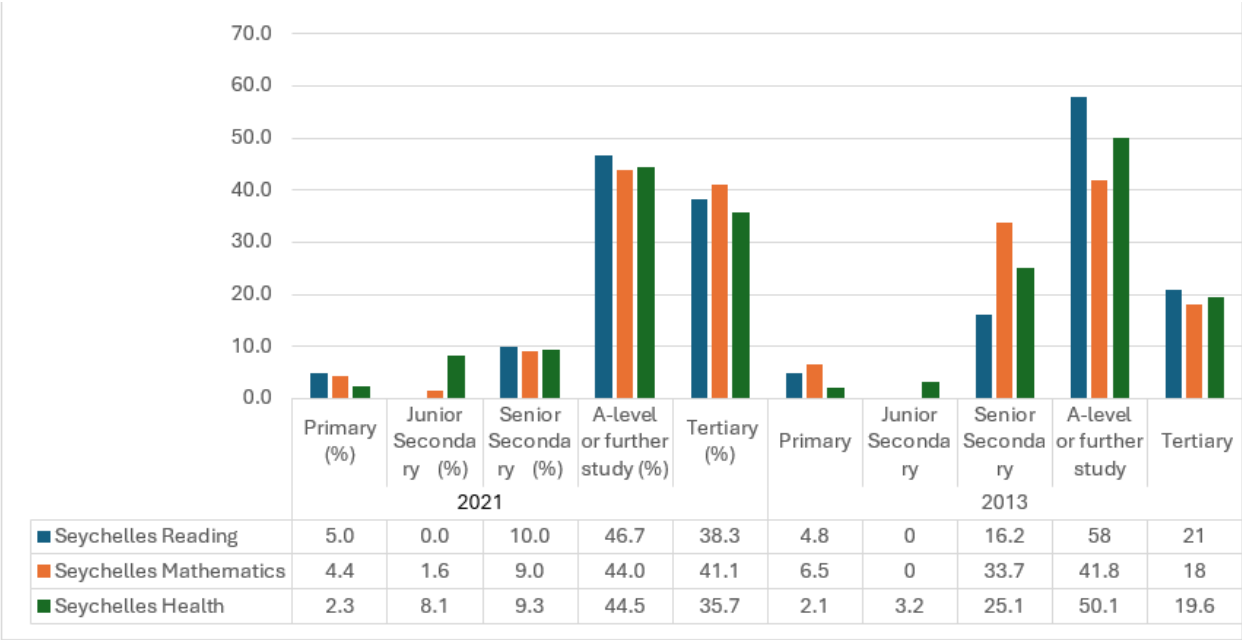
4.1.4 Establish a Continuous Professional Development Scheme

4.3 Professional characteristics of teachers

4.3.1 Highest Academic Qualification

In SEACMEQ V, the research question regarding teacher qualifications was explored, like previous SACMEQ reports. Figure 4.2 and Table 4.3 provide a detailed comparison of teacher qualifications by subject and region.

Figure 4.2: Distribution of P6 pupils by their teachers' highest academic qualification and subject (SEACMEQ V)



	2021					2013				
	Primary (%)	Junior Secondary (%)	Senior Secondary (%)	A-level or further study (%)	Tertiary (%)	Primary	Junior Secondary	Senior Secondary	A-level or further study	Tertiary
Seychelles Reading	5.0	0.0	10.0	46.7	38.3	4.8	0	16.2	58	21
Seychelles Mathematics	4.4	1.6	9.0	44.0	41.1	6.5	0	33.7	41.8	18
Seychelles Health	2.3	8.1	9.3	44.5	35.7	2.1	3.2	25.1	50.1	19.6

Table 4.3: Distribution of P6 pupils by their teachers' highest academic qualification, region, and subject (SEACMEQ V)

Regions	SEACMEQ V (2021)					
	Subject	Primary (%)	Junior Secondary (%)	Senior Secondary (%)	A-level or further study (%)	Tertiary (%)
Central	Reading	12.9	0	4.9	28.8	53.5
	Mathematics	5.2	0	5.6	57.9	31.3
	Health	6.3	13.4	6.8	42.6	31
East	Reading	0	0	9	58.4	32.6
	Mathematics	0	0	16.5	11.4	72.2
	Health	0	0	0	58	42
Island	Reading	0	0	0	84.8	15.2
	Mathematics	17.4	12.1	0	43.6	26.8
	Health	0	20	0	44.1	35.9
North	Reading	0	0	35.7	55	9.3
	Mathematics	0	0	32.4	38.6	29
	Health	0	0	36.4	63.6	0
South	Reading	0	0	12.8	56.8	30.4
	Mathematics	0	0	0	65.6	34.4
	Health	0	0	0	12.8	87.2
West	Reading	0	0	17.5	15.5	67
	Mathematics	0	0	0	17.4	82.6
	Health	0	0	100	0	0
Seychelles	**Reading**	**5**	**0**	**10**	**46.7**	**38.3**
	Mathematics	**4.4**	**1.6**	**9**	**44**	**41.1**
	Health	**2.3**	**8.1**	**9.3**	**44.5**	**35.7**

Nationally, in 2021, about 85 percent of P6 pupils were taught reading and mathematics and 80 percent were taught health/life skills by teachers who held at least either an "A Level or Further Study" or "Tertiary" qualification. This represents a considerable improvement compared to 2013, when 79 percent of P6 pupils were taught reading, 60 percent were taught mathematics and 70 percent were taught health/life skills by teachers with similar qualifications.

When considering tertiary qualifications as the most desirable, notable progress is evident. For instance, the percentage of P6 pupils taught reading by teachers with a tertiary qualification

increased to 38.3 percent in 2021 from 21 percent in 2013. Similarly, the percentage of P6 pupils taught mathematics by teachers with a tertiary qualification doubled to about 40 percent in 2021 from about 20 percent in 2013, while the percentage of P6 pupils taught health/life skills by teachers with a tertiary qualification rose to 35.7 percent in 2021 from about 20 percent in 2013. These improvements can be attributed to initiatives by SITE to upgrade teachers' qualifications, such as the customized Certificate in Education program for uncertificated in-service 'teachers' with over 20 years of experience in 2015, and the Diploma in Education through the Blended Learning Mode in collaboration with the Commonwealth of Learning in 2018, which saw 120 in-services 'teachers' graduate with an Advanced Certificate in Education in 2020 (SITE, 2021).

Despite these national improvements, disparities remain. In the Central region, some P6 pupils were still taught by teachers with only a primary level of education (12.9% for reading, 5.2% for mathematics and 6.3% for health/life skills). Similarly, on the Island, about 17 percent of P6 pupils were taught mathematics by teachers with only a primary level of education. This highlights the need for continued efforts to upgrade the qualifications of the teachers of P6 pupils.

Significant progress was observed in the North region, where the percentage of P6 pupils taught by teachers with only a primary level of education dropped from about 30 percent in reading and mathematics in 2013 to none in 2021. However, the North region remains the only area in 2021 where about 60 percent of P6 pupils were taught by teachers with at least an "A Level or Further Study" qualification across all three subjects (reading, mathematics, and health/life skills). This means that about 40 percent of P6 pupils in the North region were taught by teachers with only a senior secondary qualification, compared to other regions where about 80 percent or more of P6 pupils were taught by teachers with at least an "A Level or Further Study" qualification. This disparity suggests potential equity issues in the distribution of qualified teachers across regions, which require further attention to ensure equitable access to quality education for all P6 pupils.

4.3.2 Teaching experience

Teaching experience is expressed as the number of years' teachers have been in the profession. The Seychelles mean number of years for reading, mathematics and health teachers is presented in Figure 4.3 for the past three reporting years (2007, 2013 and 2021). Table 4.4 depicts the average teaching experience (in years) of Primary 6 teachers by region and subject for SACMEQ III, IV and V

Figure 4.3: Average Teaching Experience (years) of P6 pupils' teachers in Seychelles (SACMEQ III, IV & V) by subject

Table 4.4: Average Teaching Experience (years) of P6 pupils' teachers by Region and Subject (SACMEQ III, IV & V)

Regions	SEACMEQ V (2021)			SACMEQ IV (2013)			SACMEQ III (2007)		
	Reading (Exp) (Yrs)	Maths (Exp) (Yrs)	Health (Exp) (Yrs)	Reading (Exp) (Yrs)	Maths (Exp) (Yrs)	Health (Exp) (Yrs)	Reading (Exp) (Yrs)	Maths (Exp) (Yrs)	Health (Exp) (Yrs)
Central	15.9	20.3	17.4	12.4	20.3	18.7	16.2	15.2	12.7
East	20.9	22.5	20.9	20.6	12.7	16.6	15.6	11.9	12.0
Island	18.1	14.0	18.0	9.6	19.3	13	15.8	14.9	13.5
North	13.6	23.0	18.7	11.4	10.3	13	13.3	9.4	14.2
South	16.4	19.6	11.6	11.9	17.7	23.4	10.1	11.6	13.7
West	9.7	9.6	30.0	20.7	11.4	23	17.0	10.4	21.5
Seychelles	**16.5**	**19.2**	**17.9**	**13.8**	**16.2**	**17.9**	**15.0**	**12.8**	**14.2**

For Seychelles as a whole, Figure 4.3 shows that in 2021, P6 pupils were taught reading and mathematics by teachers with an increasing mean number of years of experience by about three years compared to 2013, while the average experience of their health/life skills teachers remained the same at about 18 years. In 2007, their teachers' average teaching experience was slightly lower than in 2013 and 2021, indicating a trend of increasing teacher experience over time. A regional comparison for 2021 reveals that P6 pupils were taught reading by teachers with the highest average experience (about 21 years), while those in the West region were taught reading by teachers with the lowest average experience (9.7 years). In 2013, the range was similar, with the lowest average experience (9.6 years) observed for P6 pupils in the Island region, and the highest

(about 21 years) in the West region. Generally, P6 pupils were more likely to be taught mathematics and health/life skills by teachers with slightly more experience than their reading colleagues.

The Teacher Management and Development (TMD) Policy (2020, p. 16) outlines strategies for equitable and transparent staff deployment and retention. It advocates for guidelines to ensure fairness in the deployment of newly appointed teachers a consultative approach to posting and transferring teachers to enhance retention.

4.3.3 In-service training and its effectiveness

Similar to SACMEQ III and IV, in SEACMEQ V, teachers were asked the number of days of in-service training they had received in the past three years and also to rate their effectiveness. using the following options and corresponding codes: 'I did not attend any in-service courses'=1; 'Not effective'=2; 'Reasonably effective'=3; 'Effective'=4; 'Very effective'=5. As was the case in 2013 and 2007, the first option was coded as missing, options 2 and 3 were coded as "not effective," and the last two options were coded as "effective." The results for the number of training days are expressed as a mean score.

Figure 4.4 shows distribution of P6 pupils by their teachers' average number of in-service training days for SACMEQ III, IV and V and Table 4.5 presents this distribution by region and subject (SACMEQ III, IV, and V). The results for in-service training effectiveness for SACMEQ III, IV and V are represented in Table 4.6.

Figure 4.4: Average number of days of in-service training of P6 pupils' teachers in Seychelles by subject (SACMEQ III, IV & V)

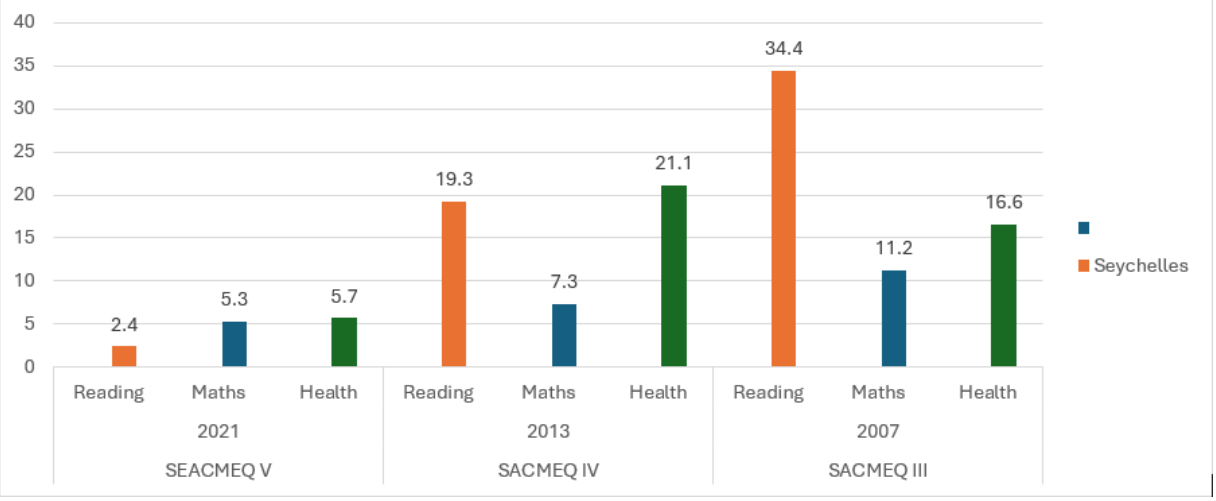


Table 4.5: Average number of days of in-service training of P6 pupils' teachers in Seychelles by Region and Subject (SACMEQ III, IV & V)

Regions	SEACMEQ V (2021)			SACMEQ IV (2013)			SACMEQ III (2007)		
	Reading In-service training (days)	Maths In-service training (days)	Health In-service training (days)	Reading In-service training (days)	Maths In-service training (days)	Health In-service training (days)	Reading In-service training (days)	Maths In-service training (days)	Health In-service training (days)
Central	2.4	4.1	1.0	27.3	4.3	12.2	4.6	4.8	2.2
East	1.1	2.9	13.4	7.1	18.3	20.2	7.1	3.9	5.9
Island	3.9	6.1	8.4	26.6	4.8	49.6	81.2	15.3	4.2
North	1.2	0.9	1.6	2.3	2.9	10.7	10.6	16.4	6.3
South	3.4	6.0	7.0	1.1	7.9	10.9	131.2	3	93.8
West	3.4	18.8	1.0	37.6	7.9	33.2	30.9	33.5	12.6
Seychelles	**2.4**	**5.3**	**5.7**	**19.3**	**7.3**	**21.1**	**34.4**	**11.2**	**16.6**

Table 4.6: Distribution of P6 pupils by their teachers in-service training effectiveness rating, region, and subject (SACMEQ III, IV & V)

Regions	SEACMEQ V (2021)				SACMEQ IV (2013)	SACMEQ III (2007)
	Subject	Did not Attend	Not effective	Effective	Effective	Effective
Central	Reading	53.9	12.7	33.4	52.8	40.6
	Mathematics	63.1	12.9	24.0	44.6	100
	Health	78.3	4.4	17.3	85.6	73.1
East	Reading	71.4	0.0	28.6	75.7	54.3
	Mathematics	47.4	0.0	52.6	54.7	100
	Health	44.1	0.0	55.9	43.2	100
Island	Reading	28.1	25.7	46.2	93.9	100
	Mathematics	0.0	44.3	55.7	88.5	84.4
	Health	15.2	0.0	84.8	100	82.6
North	Reading	57.4	24.0	18.6	35.3	57
	Mathematics	38.6	32.4	29.0	41.1	85.9
	Health	100.0	0.0	0.0	36.5	47.9
South	Reading	43.2	0.0	56.8	0	80.1
	Mathematics	16.8	0.0	83.2	16.9	66.4
	Health	17.4	19.3	63.3	55.9	90.1
West	Reading	88.7	0.0	11.3	40.6	79.7
	Mathematics	62.8	0.0	37.2	61.5	100
	Health	0.0	0.0	100.0	23.1	72.4
Seychelles	**Reading**	**55.5**	**11.1**	**33.4**	**52**	**64.7**
	Mathematics	**42.1**	**15.7**	**42.2**	**51.4**	**91.2**
	Health	**55.4**	**12.7**	**33.4**	**63.7**	**76**

Looking at the figures over the past three SACMEQ/SEACMEQ reporting years (2021, 2013, and 2007), the average number of in-service training days attended by teachers of P6 pupils in 2021 was at its lowest across all three subjects: reading (2.4 days), mathematics (5.3 days) and health/life skills (5.7 days). Compared to 2013, there was a substantial decrease in training days attended by teachers of P6 pupils: by about 5 days for reading, 2 days for mathematics and 15 days for health/life skills. Similarly, the comparison from 2007 to 2013 showed a significant decrease, with reading teachers experiencing a difference of 15 days, mathematics teachers seeing a decrease of about 4 days, and health/life skills teachers experiencing an increase of about 5 days. These trends indicate a concerning gradual decrease in in-service training for teachers of P6 pupils.

Regional comparisons for 2021 reveal wide disparities in training days. For instance, P6 pupils in the North and East regions were taught reading by teachers who received only 1 day of training, while those on the Island were taught reading by teachers who received about 4 days of training. For health/life skills, the range was even wider, with P6 pupils in the North region taught by teachers who received only 1 day of training, compared to those in the West region, who were taught by teachers with about 19 days of training. In mathematics, the range was about 14 days. Similar disparities were observed in 2013, with even wider discrepancies. For example, P6 pupils in the South region were taught reading by teachers who received only 1 day of training, while those in the West region were taught reading by teachers who received about 38 days of training. For health/life skills, the range was also substantial. P6 pupils in the North region were taught health/life skills by teachers with a minimum of 11 days training and P6 pupils on the Islands taught by teachers with a maximum of about 50 days of training. These disparities suggest the need for a more equitable and transparent training plan to ensure that all P6 pupils receive consistent, quality instruction.

Notably, P6 pupils in the North region were more likely to be taught by teachers who had the least access to in-service training across all three subjects during the three reporting years. This region also had a higher proportion of P6 pupils taught by teachers with lower academic qualifications, specifically at the senior secondary level or below. The result suggests that teachers of P6 pupils in the North region not only have lower qualifications but have also had fewer opportunities for professional development compared to other regions. This further highlights the need for a systematic and equitable training plan supported by an effective monitoring system.

Of note, in 2021, about half of P6 pupils across all three subjects were taught by teachers who did not attend in-service training, suggesting a lack of sufficient training opportunities or systematic mechanisms to engage teachers.

Regarding perceived effectiveness, only about one-third of P6 pupils in 2021 were taught reading by teachers who found in-service training effective, compared to about half in 2013 and two-thirds in 2007. For mathematics, approximately 40 percent of P6 pupils were taught by teachers who found the training effective in 2021, down from 50 percent in 2013 and about 90 percent in 2007. For health, only about one-third of P6 pupils were taught by teachers who perceived the training as effective in 2021, compared to about 60 percent in 2013 and three-quarters in 2007. At the regional level, P6 pupils in the South and Island (44%) regions were more likely to be taught mathematics by teachers who found in-service training effective, while those in the North (32.4%) region were taught by teachers who perceived it as less effective. These findings underscore the need to improve the quality and delivery of professional development programs across regions to ensure equitable benefits for all P6 pupils.

4.4 Teacher work time allocation

4.4.1 Marking & Lesson Plan preparation hours per week

The link between favourable working conditions and teacher instructional effectiveness has been well documented. One of the important recommendations of the first SACMEQ study that Seychelles participated in 2000 was the need for the Ministry of Education to reduce class sizes. This subsequently led to various interventions, one of which was a reduction in the number of periods that teachers taught per week, with the expectation that they would teach 30 periods per week.

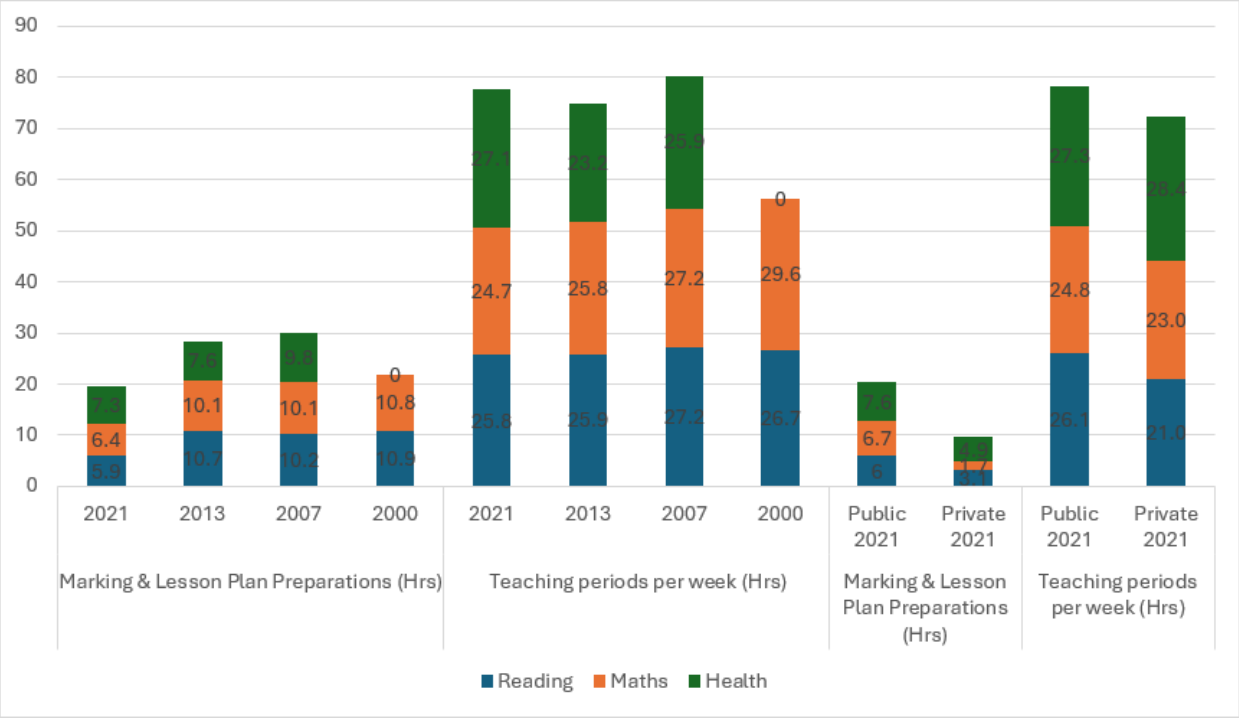
Moreover, teachers had to spend time, often after a normal teaching day, to prepare lessons and mark P6 pupils' work. These and together with other work conditions could have an impact on the quality of teaching and the Ministry has sought ways to mitigate the possible adverse effects of these factors as part of its overall teacher retention strategy.

The distribution of P6 pupils by the mean number of hours their teachers spent on lesson planning, marking and teaching are presented in Table 4.7 and Figure 4.5.

Table 4.7: The number of hours P6 pupils' teachers spent on lesson planning and teaching by region and subject (SEACMEQ V)

Regions	SEACMEQ V (2021)					
	Total Hours Marking & Lesson Plan Preparations			Total number of Teaching periods per week		
	Reading	Maths	Health	Reading	Maths	Health
	Mean	Mean	Mean	Mean	Mean	Mean
Central	4.4	4.7	5.6	26.5	24.8	27.4
East	5.9	8.7	10.5	28.0	28.3	27.7
Island	8.8	6.8	5.7	25.6	25.6	28.9
North	5.8	7.2	7.0	24.4	19.8	22.9
South	7.3	8.8	8.9	23.8	21.0	29.9
West	5.4	4.4	10.0	21.9	28.9	13.0
Seychelles	**5.9**	**6.4**	**7.3**	**25.8**	**24.7**	**27.1**

Figure 4.5: The number of hours P6 pupils' teachers spent on lesson planning and teaching (SACMEQ II, III, IV & V)



In 2021, the number of hours P6 pupils' teachers spent on lesson planning and teaching in Seychelles revealed notable shifts. Health/life skills teachers spent most time on marking and lesson preparation time (7.3 hours per week) and had the highest teaching hours (27.1 hours per week). In contrast, P6 pupils' Reading and Mathematics teachers spent fewer hours teaching, at

25.8 and 24.7 hours per week, respectively, marking the lowest teaching hours in the four reporting years.

A trend of decreasing time spent on marking and lesson preparation was observed among P6 pupils' teachers across all subjects in Seychelles in 2021 compared to previous years. P6 pupils' reading teachers, who previously spent around 11 hours on these tasks in 2000, 2007 and 2013, reduced this to about 6 hours in 2021. Similarly, Mathematics teachers' preparation time fell from 10.8 in 2000 to 6.4 in 2021, while Health/life skills teachers decreased from 9.8 hours in 2007 to 7.3 in 2021. Factors such as team planning and availability of online resources may have contributed to this trend. It is recommended that causal factors be investigated to better understand the context.

Notably, P6 pupils in private schools were taught by teachers who spent less time on marking, lesson plan preparation, and teaching across the three subjects compared to public schools. However, for Health/life skills, private school teachers reported higher teaching hours than those in public schools. This could be attributed to the use of online resources and pre-made programme and resources such as Cambridge. Further investigation into private school practices and their impact on P6 pupil performance is recommended.

4.4.2 Teaching hours per week

The number of hours P6 pupils' teachers spent on teaching per week over the four reporting years revealed stable schedules for reading, with teachers spending between twenty-six to twenty-seven hours per week. For Mathematics, teaching hours ranged between twenty-five to twenty-nine hours per week, with a gradual slight decrease observed over the years, possibly due to the inclusion of expatriate teachers. For Health/life skills, teaching hours ranged from twenty-three hours in 2013 to twenty-seven hours in 2021, potentially due to teacher shortages or health/life skills teachers covering other classes during absenteeism.

At the regional level, disparities were observed in teaching hours. For Mathematics, P6 pupils' teachers in the North (19.8%) and South (21%) regions spent fewer hours teaching, both below the national average. This highlights the need for equitable teaching time across regions. Additionally, significant variations in marking and lesson planning times were observed. For Reading, P6 pupils' teachers in the Central region spent the least amount of time on preparation

(about 4 hours), compared to about 9 hours on the Islands. For Mathematics, there was a variation of about 5 hours between the regions with the lowest and highest preparation times. For Health/life skills, P6 pupils' teachers in the Central region had the lowest preparation hours, while those in the West region spent up to 10 hours. These discrepancies underscore the need for consistent implementation of standards and closer monitoring of teacher workload indicators to ensure fairness across regions.

Policy Suggestion 4.2:

Assess and strengthen the monitoring system in place for effective teaching and learning practices in all schools and to maintain consistency and fairness across all regions.

4.5 Teacher professional support

As part of the various forms of support provided to Primary Six teachers, those teaching Reading, Mathematics and Health were asked to respond with "yes" or "no" to statements regarding the use of resource centres. The results from 2021 are compared with those from 2013 in Table 4.5.

Table 4.8: Percentage of P6 pupils with teachers using the Resource Centres by subject

Regions	SEACMEQ V (2021)			SACMEQ IV (2013)		
	Reading	Maths	Health	Reading	Maths	Health
	%	%	%	%	%	%
Looking for materials	20.8	24.2	31.7	83.3	94.3	69.5
Borrowing materials	30.1	25.8	36.3	79	82.4	75.6
Making materials	7.0	10.8	19.6	35	18.1	14.1
Attend training courses	6.5	15.2	12.6	5.9	29.7	76
Exchange Ideas	8.7	15.3	13.8	15.6	24.8	60.8
Seek Advice	12.9	22.4	16.6	31.1	7.3	64.3

As noted in Table 4.8, there was a notable decrease in the utilization of resource centres in 2021 compared to 2013 across all three subjects. For example, 20.8 percent of P6 pupils were taught by Reading teachers who reported using resource centres for materials in 2021, a significant decrease from 83.3 percent in 2007. This decline may be attributed to COVID-19 pandemic restrictions. Moreover, the increased promotion and adoption of online resources, particularly in the aftermath of the pandemic, could also have contributed to the reduced reliance on physical resource centres.

Policy Suggestion 4.3: The Technical and Digital Technology Division should:

- Intensify efforts to transform the Documentation Centre into a digital and online learning resource centre.
- Commit to supporting and empowering staff to utilize and access remote and online digital resources to enhance teaching and learning and advanced instructional practices.

4.6 Signing of homework by parents

Among the various indicators used to measure the extent of parental support in their children's learning, teachers were asked the following question: "Do you ask parents or guardians to sign that P6 pupils have completed their home assignments?". Teachers were required to answer either "yes" or "no."

Table 4.9: Distribution of P6 pupils by the proportion of their parents who signed homework by region and subject

Regions	SEACMEQ V (2021)			SACMEQ IV (2013)			SACMEQ III (2007)			SACMEQ II (2000)		
	Reading %	Maths %	Health %	Reading %	Maths %	Health %	Reading %	Maths %	Health %	Reading %	Maths %	Health %
Central	100.0	73.2	80.6	73.3	77	94.7	80.8	80.8	65.5	91.2	52.3	N/A
East	76.0	100.0	68.2	67.4	60.4	41.7	78.1	70.4	88.3	100	35.1	N/A
Island	100.0	100.0	100.0	100	100	100	72.5	75.5	63.7	65.9	65.9	N/A
North	82.9	100.0	100.0	63.3	75.7	92.3	79.7	46.3	58.5	74.9	45.9	N/A
South	100.0	100.0	100.0	72.9	66.3	71.1	57.9	42.7	57.9	49.5	61.4	N/A
West	88.7	100.0	0.0	74.7	73.9	83.4	68	49.5	68	100	46	N/A
Seychelles	**92.7**	**89.4**	**85.2**	**75.1**	**76.1**	**85.6**	**77.8**	**65.1**	**66.9**	**83**	**50.7**	**N/A**

Figure 4.6 Distribution of P6 pupils by the proportion of their parents who signed homework by subjects

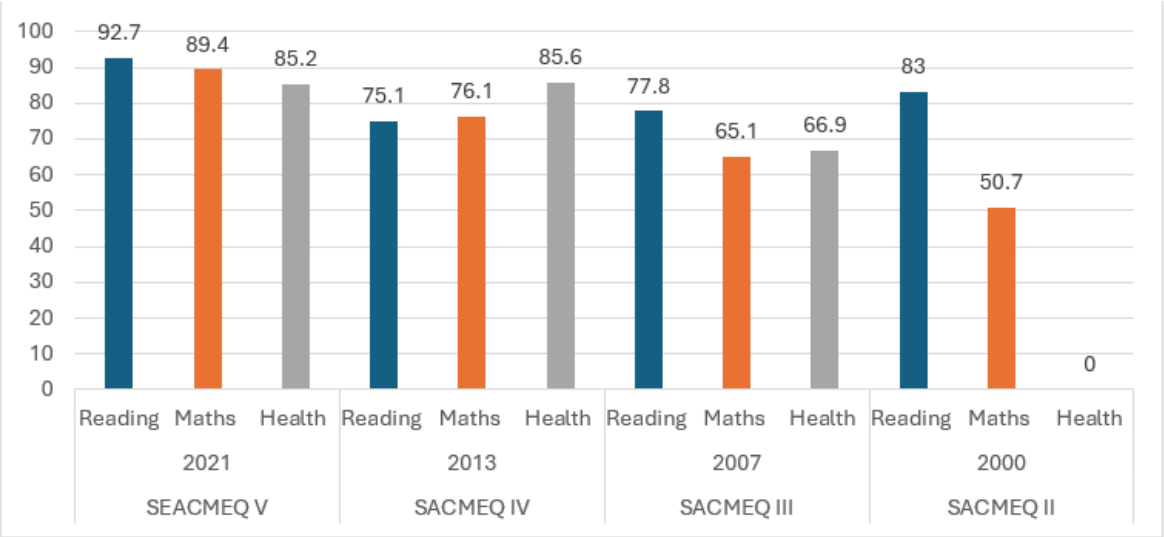
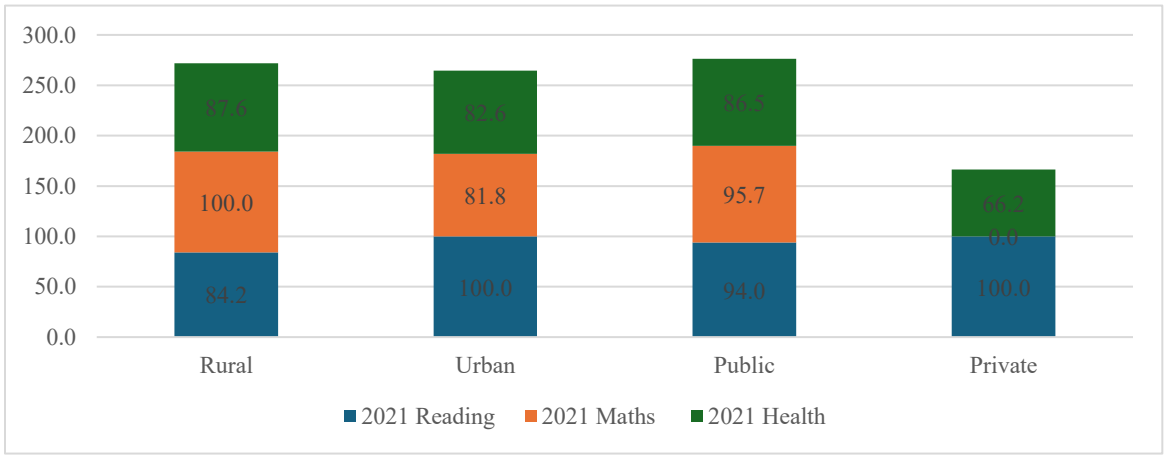


Figure 4.7 Distribution of P6 pupils by the proportion of their parents who signed homework by Rural/ Urban areas and Public /Private schools for 2021



The proportion of P6 pupils whose teachers reported that their parents signed homework generally improved from 2013 to 2021, with only a negligible decrease of 0.4 percent in Health/life skills. In 2021, the highest proportion of P6 pupils were distributed among teachers who reported parental homework signing across the four reporting years in all three subjects. For Mathematics, for instance, the distribution of P6 pupils increased by 16 percent from 2000 to 2007, 11 percent increase from 2007 to 2013 and 13 percent from 2013 to 2021, totalling a 40 percent increase from 2000 to 2021.

Regionally, the distribution in 2021 showed variability, with 100 percent of P6 pupils in the East and South regions distributed among teachers who reported parents signed the homework, while those in the Central region represented 76 percent. For Mathematics, 100 percent of P6 pupils in all regions were distributed among teachers who reported parental signing except for the 73.2 percent in the Central region. For Health/life skills, P6 pupils in the Island, North and South regions were distributed among teachers who reported full parental signing, while none in the West region were distributed among teachers who reported parental signing. In rural areas, P6 pupils in mathematics were distributed among teachers who reported perfect signing rates, while in urban areas, perfection was observed in reading.

It is noteworthy that while homework policies do not mandate parental signing, some schools have included this practice in their School Handbooks, emphasizing the implementation of school-specific guidelines for parental homework monitoring.

When comparing public and private schools, P6 pupils in private schools were distributed among teachers who reported approximately 70 percent parental signing in reading, whereas for Health/life skills, this proportion was higher. However, none were distributed among teacher who reported signing of homework in mathematics. In contrast, over four-fifths of P6 pupils in public schools were distributed among teachers who reported parents signing homework in all three subjects. Further investigation into the availability private school homework policies and their impact on parental involvement is encouraged.

Overall, the distribution of P6 pupils across teachers who reported parental signing improved significantly in SEACMEQ V, though room for improvement remains in certain regions.

***Policy Suggestion 4.4*:**
The review of the Policy on Homework (2003) should include parental signing to ensure parental monitoring of homework in all schools.

Conclusion

The distribution of P6 pupils across teachers with varying characteristics and working conditions reveals several critical trends and concerns. In 2021, P6 pupils were distributed among an aging teaching population, with the average age of teachers in all three subjects exceeding 40 years for the first time. While slight improvements were observed in the recruitment of mathematics and health/life skills teachers for P6 pupils, the recruitment of male teachers remains a challenge.

P6 pupils were distributed among teachers with improved qualifications, with more holding tertiary qualifications. About 40 percent of P6 pupils in the North region were distributed among teachers with only a senior secondary qualification, in contrast to other regions where about 80 percent or more had an "A Level or Further Study" qualification. While experience levels also increased among teachers of P6 pupils in reading and mathematics, regional variations persisted. Additionally, P6 pupils, particularly in the North, were distributed among teachers with decreasing in-service training days. These highlights the need for systematic and equitable teacher training programmes prioritizing these educators.

Regarding workload, P6 pupils taught by Health/life skills teachers were distributed among those with the highest marking, lesson preparation and teaching hours, potentially due to heightened vigilance placed within the Education System during the COVID-19 pandemic. However, a decreasing trend in preparation and marking time was observed across all subjects taught to P6 pupils. Regional variations in teaching hours for reading and mathematics, at their lowest in 2021, indicate the need for consistent standards and closer monitoring. The use of resource centres by teachers of P6 pupils has declined, likely due to COVID-19 restrictions and increased reliance on online resources. On a positive note, P6 pupils were distributed among teachers who reported improved signing of homework by parents compared to previous years, although further improvements are needed in certain regions.

The data highlights the distribution of P6 pupils amongst an aging teaching population, improved qualifications but regional disparities in training and support. A comprehensive review of staffing policies and the implementation of equitable training plans for teachers of P6 pupils are necessary to ensure consistency and fairness across all regions. The Teacher Management Policy (2020) addresses many of these challenges, reinforcing the need for the MOE to provide relevant resources for its successful implementation.

Chapter 5: Characteristics of School Heads and their Schools

5.1 Introduction

School heads play a critical role as managers and decision-makers (Hungi, 2011). They are pivotal to school operations, both academic and administrative, as described by Aquino, Afalla and Fabelico (2021). Given their significant role, educational leadership has become a dominant concern in educational systems. Defining the qualities and ideal characteristics of a school head has been a challenging task for policymakers. Research has consistently linked effective leadership to school performance and quality teaching.

The general practice for recruiting school heads has been to promote qualified and experienced teachers who have consistently demonstrated effective teaching and proven leadership qualities to the position of school head. To enhance leadership competencies, since 2005, the Ministry of Education has endeavoured to provide school heads with leadership training programmes, such as Master of Business Administration (MBA), Master of Arts (MA) and Master's in Educational Leadership. The University of Seychelles delivered the latter for the first time as a blended programme awarded by the University of Mauritius from 2018 to 2020 (Deutschmann, Klymenko & Zelime, 2022).

This chapter presents SEACMEQ V (2021) findings on the distribution of Primary Six pupils based on the characteristics of their school heads and the types of schools they attended, with comparisons to SACMEQ III (2007) and SACMEQ IV (2013).

5.2 Personal Characteristics of Primary Six Pupils' School Heads

Age and gender are critical factors in school leadership, with research highlighting gender differences in leadership effectiveness and their influence on innovation (Ismail, Ahmad and Aman, 2021). Balancing these attributes in school leadership is crucial for effective decision-making and strategic planning. SEACMEQ data from 2007, 2013 and 2021 provide insights into the age and gender profiles of school heads across Seychelles. The results, presented in Table 5.1, detail these demographics in relation to the distribution of Primary Six pupils. Figures 5.1 and 5.2 illustrate the distribution of Primary Six pupils' according to their school heads personal characteristics (age and gender) by location and school ownership for the SEACMEQ V project, , providing another perspective on their distribution.

Table 5.1: Mean Age of P6 Pupils' School Heads and Distribution of P6 pupils in schools led by female School Heads, by Region

Regions	SACMEQ III 2007		SACMEQ IV 2013		SEACMEQ V 2021	
	Age in Years	Gender Female	Age in Years	Gender Female	Age in Years	Gender Female
	Mean	%	Mean	%	Mean	%
Central	46.9	68.3	54.8	79.1	54.4	100.0
East	48.3	100.0	47.2	100.0	52.9	100.0
Island	54.6	100.0	49.7	64.4	54.2	71.9
North	50.7	100.0	50.7	100.0	47.1	100.0
South	52.0	100.0	58.9	100.0	49.3	100.0
West	50.9	49.5	44.9	74.3	53.7	100.0
Seychelles	**49.8**	**82.8**	**51.5**	**84.9**	**52.6**	**96.4**

Figure 5.1: Mean Age of P6 Pupils' School Heads by Location and School Ownership

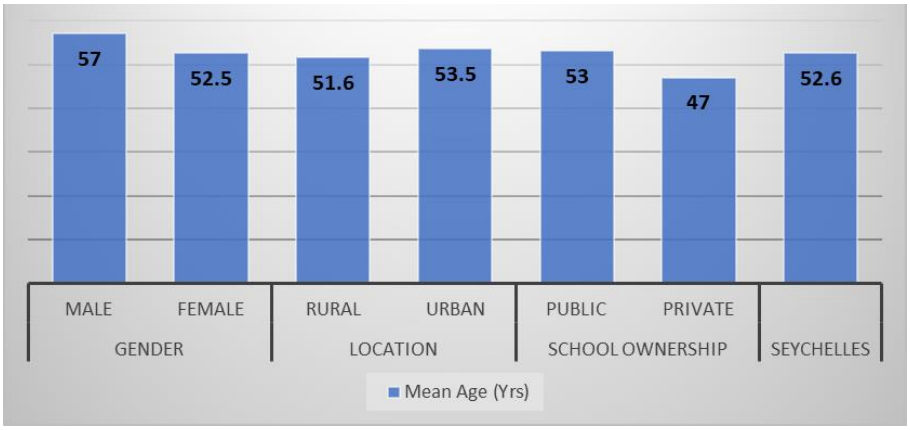
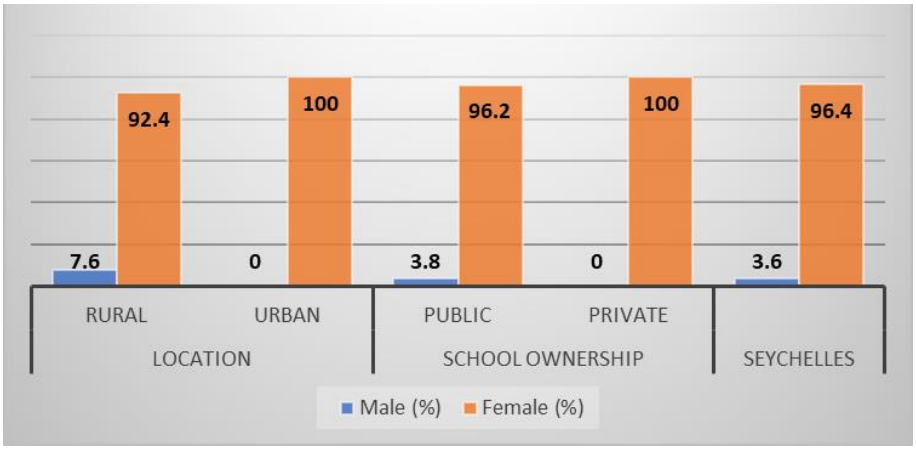


Figure 5.2: Distribution of P6 pupils by their School Heads gender, by Location and School Ownership



5.2.1 Mean Age of P6 Pupils' School Heads and Distribution of P6 pupils in schools led by female School Heads, by Region

The mean age of P6 pupils' Primary School Heads showed an overall increase from 2007 to 2021, with regional variations suggesting a continuing preference for older school heads (Table 5.1, Figure 5.1). In 2007, the mean age was 49.8 years, with P6 pupils' school heads in the Central region averaging 46.9 years, while those in the Island region averaged 54.6 years. By 2013, the mean age had risen to 51.5 years, with significant increases in the Central region (to 54.8 years) and the South region (an increase of 6.9 years). In contrast, decreases were noted in the East (by 1.1 years), Island (by 4.9 years) and the West (by 6 years).

In 2021, the mean age increased further to 52.6 years. P6 pupils' school heads in the Central region had the highest mean age at 54.4 years, followed closely by the Island region (54.2 years) and the West region (53.7 years). The East region rebounded to 52.9 years, while the South and North regions showed decreases to 49.3 and 47.1 years, respectively.

P6 pupils' male school heads were significantly older (mean age of 57 years) compared to their female counterparts (mean age of 52.5 years). P6 pupils' school heads in urban areas were slightly older (mean age of 53.5 years) than those in rural areas (51.6 years). Regarding school ownership, P6 pupils' public school heads had a mean age of 53 years in 2021, while private school heads were younger, averaging 47 years.

5.2.2 Distribution of P6 Pupils to Female School Heads by Region, Location and School Ownership

According to the report 'Towards a New Model of Schooling in Seychelles' produced by the Commonwealth of Learning (2021), 'among educational personnel, women outnumber men as teachers, school leaders, and officials in the Ministry of Education'. The proportion of P6 pupils in schools led by female heads has consistently dominated leadership positions in Seychelles, increasing from 82.8 percent in 2007 to 84.9 percent in 2013 and 96.4 percent in 2021. This indicates stable and dominant female leadership but highlights a gender disparity in school leadership (Table 5.1, Figure 5.2).

Regional trends reveal that in the East, North and South regions, all P6 pupils were in schools led by female school heads across all SEACMEQ periods, while the Central and West regions achieved full

female leadership by 2021 only. The Island region saw a decline in female representation in 2013 (64.4%) but rose to 71.5 percent in 2021.

In urban areas, all P6 pupils were in schools led by female heads across all SEACMEQ periods. In rural areas, female leadership increased steadily, reaching 92.4 percent by 2021, with only 7.6 percent of P6 pupils in schools led by male heads.

School ownership data reveal similar patterns. In public schools, 96.2 percent of P6 pupils were in schools led by female heads in 2021, with males representing only 3.8 percent. Private schools were entirely led by females, highlighting a strong predominance of women in educational leadership regardless of ownership.

This gender distribution highlights the increasing trend of female leadership in Seychelles' primary schools, which raises concerns for leadership diversity. Further investigation is needed to understand the underlying causes and implications for educational policy and administration.

5.3 Professional characteristics of school heads

The Education Reform 2010 granted school heads more autonomy to lead and manage schools. Effective leadership and management are essential for improving pupil performance and fostering school improvement (Department of Education, 2010). Leadership directs the efforts of pupils, staff and parents toward achieving school goals, while management ensures efficient organization and administration. Promotions to leadership positions should prioritize qualifications, experience, leadership qualities, organizational skills and past performance appraisals. Establishing standards for academic qualifications and training is necessary to ensure the recruitment of competent school heads. Tables 5.2 and 5.3 detail the distribution of Primary Six Pupils by the professional characteristics of their school heads across regions in Seychelles, comparing academic qualifications, teaching and management experience, and training from SACMEQ IV and V data.

Table 5.2a: Distribution of P6 pupils by their School Heads' academic qualification

Region	Academic Qualification 2013			Academic Qualification 2021		
	Senior Secondary	A-level or further study	Tertiary	Senior Secondary	A-level or further study	Tertiary
	%	%	%	%	%	%
Central	-	0.0	100.0	0.0	0.0	100.0
East	-	0.0	100.0	24.9	0.0	75.1
Island	-	27.0	73.0	0.0	0.0	100.0
North	-	0.0	100.0	0.0	28.1	71.9
South	-	0.0	100.0	0.0	57.8	42.2
West	-	51.8	48.2	0.0	0.0	100.0
Seychelles	-	10.6	89.4	4.3	9.3	86.4

Table 5.2b: Teaching and Management Experience (in years and days) of P6 Pupils' School Heads

Region	Teaching and Management Experience (2013)			Teaching and Management Experience (2021)		
	Teaching Experience	Management Experience	Management Training Experience	Teaching Experience	Management Experience	Management Training Experience
	Years	Years	Days	Years	Years	Days
Central	27.9	12.2	81.2	33.4	7.7	121.0
East	26.7	8.7	100.0	32.9	3.7	470.1
Island	30.7	8.4	100.0	34.3	7.1	366.0
North	32.1	12.4	100.0	25.0	4.8	429.1
South	40.0	12.3	100.0	28.2	4.2	43.9
West	24.1	7.4	74.3	27.2	8.9	614.2
Seychelles	**29.6**	**10.6**	**90.5**	**31.2**	**6.3**	**312.4**

Table 5.3: Distribution of P6 Pupils by their School Heads Desirable Quality

Regions	School Head with 1 year or more of teacher training	School Heads with Senior Secondary qualification or better	School Heads with management training	School Heads with HIV/AIDS training
	%	%	%	
Central	100.0	100.0	85.1	64.2
East	100.0	100.0	100.0	78.1
Island	100.0	100.0	100.0	100.0
North	100.0	100.0	60.5	71.9
South	100.0	100.0	100.0	100.0
West	100.0	100.0	89.3	100.0
Seychelles	**100.0**	**100.0**	**87.9**	**79.4**

5.3.1 Distribution of P6 Pupils across School Heads Academic Qualifications

The distribution of P6 pupils across school heads based on academic qualifications exhibited minor changes from 2013 to 2021. In 2013, school heads with tertiary qualifications led 89.4 percent of pupils. By 2021, this decreased slightly to 86.4 percent. The percentage of P6 pupils led by school heads with A-level or further study qualifications declined from 10.6 percent in 2013 to 9.3 percent in 2021, while those led by school heads with senior secondary qualifications increased to 4.3 percent in 2021.

Regional variations were notable. In 2021, school heads with tertiary qualifications, a marked improvement from 2013 in the Island (73.0%) and West (48.2%) regions, led 100 percent of pupils in the Central, Island and West regions. However, the East, North and South regions saw declines, with tertiary qualifications dropping to 75.1 percent, 71.9 percent and 42.1 percent respectively. Notably, 24.9 percent of pupils in the East region were led by school heads with only senior secondary qualifications in 2021, compared to none in 2013. Efforts to improve academic qualifications have been uneven, with progress in some regions but declines in others, highlighting the need for continued efforts to ensure uniformity across all regions.

5.3.2 Teaching and Management Experience (in years and days) of P6 Pupils' School Heads

The teaching experience of P6 pupils' school heads increased from 29.6 to 31.2 years between 2013 to 2021, while management experience decreased from 10.6 to 6.3 years. Management training, however, rose significantly from 90.5 to 312.4 days, emphasizing a focus on professional development.

Regionally, P6 pupils' school heads in the Central, East and Island regions saw reductions in management experience but increases in management training by 2021. The North region saw decreases in both teaching and management experience but maintained strong emphasis on training. The West region displayed consistent growth in teaching and management experience alongside the highest emphasis on management training amongst the regions. In contrast, the South region showed declines across all metrics, signalling a need for targeted intervention.

The data suggests a national shift toward prioritizing management training, though regional disparities in teaching and management experience require further policy attention.

5.3.3 Distribution of P6 Pupils across School Heads Desirable Quality

By 2021, school heads with at least one year of teacher training and senior secondary qualifications or higher were leading all P6 pupils. Additionally, school heads who had undergone management training led 87.9 percent of pupils, and school heads who received HIV-AIDS training led 79.4 percent of pupils, reflecting a commitment to comprehensive professional development.

Regionally, all P6 pupils in the Island and South regions were under school heads who met 100 percent of the required metrics. However, in the East and West regions there were slight gaps, particularly in HIV-AIDS training (78.3%) and management training (89.3%). The Central and North regions had lower figures, with only 64.2 percent and 71.9 percent of pupils being led by school heads who received HIV-AIDS training, respectively. In the North region, a notably low 60.5 percent of P6 pupils were led by school heads with Management training, far below the national average of 87.9 percent. The findings highlight significant regional variations, with the Central and North regions requiring greater focus on management and HIV-AIDS training to match national standards.

The analysis underscores the progress made in enhancing the qualifications and training of school heads, while pointing to areas for further development to ensure uniformity across the country.

Policy Suggestion 5.1: Establish and implement personal and professional competency standards for recruiting, deploying and retaining school heads.

5.4 General School Condition and Resources

Research highlights the link between school effectiveness and the condition of infrastructure and resources. School infrastructure encompasses buildings, grounds and other assets within the school's legal boundary. The Ministry of Education ensures infrastructure provision, while school management handles maintenance (Department of Education, 2010).

Data from SACMEQ IV and SEACMEQ V assessed the desirable physical resources and school facility conditions, as shown in Tables 5.4 and 5.5 respectively.

Table 5.4: Distribution of P6 pupils by available Desirable Physical School Resources by Region

Regions	SACMEQ IV (2013)				
	Satisfactory building conditions	Staff room	School head office	School fence	Electricity
	%	%	%	%	%
Central	60.8	100.0	100.0	100.0	100.0
East	69.3	100.0	100.0	69.3	100.0
Island	64.4	100.0	100.0	100.0	100.0
North	100.0	100.0	100.0	77.4	100.0
South	56.7	100.0	100.0	100.0	100.0
West	26.1	66.7	100.0	100.0	100.0
Seychelles	**63.2**	**95.6**	**100.0**	**92.2**	**100.0**

Regions	SEACMEQ V (2021)				
	Satisfactory building conditions	Staff room	School head office	School fence	Electricity
	%	%	%	%	%
Central	64.6	100.0	100.0	100.0	100.0
East	100.0	100.0	100.0	100.0	100.0
Island	71.9	100.0	100.0	100.0	100.0
North	88.6	100.0	100.0	100.0	100.0
South	61.5	100.0	100.0	100.0	100.0
West	25.7	85.0	100.0	100.0	100.0
Seychelles	**70.3**	**98.4**	**100.0**	**100.0**	**100.0**

Table 5.5: Distribution of P6 Pupils by their School Heads' ratings of General School Building Condition by Region

Regions	SACMEQ IV (2013)				
	Some need complete rebuilding	Some classrooms need major repairs	Most or all classrooms need minor repairs	Some classrooms need minor repairs	All classrooms are in good condition
	%	%	%	%	%
Central	00.0	20.4	18.8	20.9	39.9
East	00.0	30.7	00.0	69.3	00.0
Island	00.0	35.6	00.0	37.5	27.0
North	00.0	00.0	00.0	28.5	71.5
South	00.0	43.3	00.0	27.1	29.6
West	00.0	48.2	25.7	26.1	00.0
Seychelles	**00.0**	**27.2**	**9.5**	**32.7**	**30.5**

Regions	SEACMEQ V (2021)				
	Some need complete rebuilding	Some classrooms need major repairs	Most or all classrooms need minor repairs	Some classrooms need minor repairs	All classrooms are in good condition
	%	%	%	%	%
Central	0.0	11.7	23.7	25.6	39.0
East	0.0	0.0	0.0	21.9	78.1
Island	28.1	0.0	0.0	34.5	37.4
North	0.0	0.0	11.4	60.5	28.1
South	0.0	38.5	0.0	42.2	19.3
West	0.0	74.3	0.0	0.0	25.7
Seychelles	**3.6**	**15.9**	**10.2**	**29.4**	**40.9**

5.4.1 Desirable Physical School Resources of Primary Six Pupils by Region

Between 2013 and 2021, the distribution of P6 pupils across schools with satisfactory building conditions improved, increasing from 63.2 percent in 2013 to 70.3 percent in 2021. The proportion of P6 pupils in schools with staffroom availability rose slightly from 95.6 percent to 98.4 percent. By 2021, all P6 pupils were in schools where school heads reported 100 percent availability of school heads' offices, school fences and electricity. However, the West region showed a decline in P6 pupils attending schools with satisfactory building conditions, dropping from 26.1 percent in 2013 to 25.7 percent in 2021, indicating a need for targeted regional intervention.

5.4.2 General School Building Condition of Primary Six Pupils by Region

From 2013 to 2021, the distribution of P6 pupils in schools with classrooms in good condition rose from 30.5 percent to 40.9 percent, while those in schools needing minor repairs decreased from 32.7 percent to 29.4 percent. However, 3.6 percent of P6 pupil were in schools requiring complete rebuilding.

The East region showed significant improvements, with P6 pupils in schools with classrooms needing major repairs decreasing from 20.7 percent to 0.0 percent, while those in schools with good condition classrooms rose to 78.1 percent from 0.0 percent in 2013. The Central region also improved, reducing the proportion of P6 pupils in schools needing major repairs from 20.4 percent to 11.7 percent.

In contrast, declines were observed in the Island, North, South and West regions. The Island region saw an increase in P6 pupils attending schools needing complete rebuilding, from 0.0 percent to 28.1 percent. The North region had pupils in schools with classrooms needing minor repairs increasing from 0.0 percent to 11.4 percent, and in schools with classrooms in good condition decreasing from 71.5 percent to 28.1 percent. The South region reported an increase in the distribution of P6 pupils in schools needing minor repairs, from 27.1 percent to 42.2 percent, and a decline in good condition classrooms from 29.6 percent to 19.3 percent. The West region saw a rise in the distribution of P6 pupils in schools needing from 48.2 percent to 74.3 percent.

Policy Suggestion 5.2: Implement an Infrastructure Development Plan for the Ministry of Education aimed at ensuring that all school buildings meet minimum standards of safety and functionality, with a particular focus on schools with declining conditions.

5.5 School Management Activities

In any school, certain activities fall under the jurisdiction of the school head. The influence of the school head is pivotal and encompasses promoting a range of school-wide enrichment activities, mitigating detrimental behaviours among pupils and staff that could adversely affect the school ethos and more. Education planners can utilize this information to monitor implementation of current policies or to initiate and evaluate relevant policy interventions.

Data from SEACMEQ V (2021) in Table 5.6 reflect the distribution of P6 pupils' according to their school heads ratings on selected management activities. The ratings were conducted on a scale from one to nine, providing an overview the distribution of P6 pupils' according to the school heads' perspectives on these essential management activities.

Table 5.6: Distribution of P6 pupils by the ratings of their School Heads on the importance of selected school management activities

Activities	SACMEQ V (2021)								
	School Heads' Ratings								
	1st (%)	2nd (%)	3rd (%)	4th (%)	5th (%)	6th (%)	7th (%)	8th (%)	9th (%)
Making Contact with the community	8.2	4.0	4.4	1.2	5.8	21.4	5.8	18.8	30.4
Monitor Pupil Progress	30.0	30.6	13.9	0.0	20.5	0.0	5.0	0.0	0.0
Administrative tasks concerning the functioning of the school	19.2	8.6	13.4	9.2	9.3	10.1	11.1	6.5	12.6
Discussing educational objectives	43.7	16.3	15.2	14.4	5.6	1.2	3.7	0.0	0.0
Activities aimed at the professional development of teachers	8.2	6.3	28.2	39.0	8.1	5.8	0.0	4.4	0.0
Activities aimed at the professional development of School Heads	8.2	5.4	9.5	5.4	8.9	17.2	17.2	4.4	23.8
Monitoring teachers' behaviour	4.6	3.7	0.0	4.4	4.5	12.8	21.1	37.0	11.9
Monitoring pupils' behaviour	8.2	0.0	0.0	5.8	19.5	17.9	14.9	20.7	13.0
Creating a child-friendly school environment	31.8	20.7	7.2	12.5	9.5	5.4	13.0	0.0	0.0

5.5.1 Distribution of P6 pupils by the ratings of their School Heads on the importance of selected school management activities

The data from SEACMEQ V reveals that a significant proportion of P6 pupils (43.7%) attend schools where their heads consider discussing educational objectives as the most important activity, indicating these schools place strong emphasis on aligning school goals with national standards. Similarly, 31.8 percent of pupils are in schools that prioritize creating child-friendly environments, suggesting these pupils benefit from learning spaces designed to be supportive and nurturing. Additionally, 30 percent of pupils attend schools where monitoring pupil progress is highly valued , emphasizing focus on tracking academic outcomes.

However, the distribution also highlights that about 30.4 percent of pupils are enrolled in schools where maintaining contact with the community is rated as least important, potentially affecting these pupils access to community support and engagement. More concerning, 37 percent of pupils attend schools where monitoring teacher behaviour is given low priority, while 20.7 percent are in schools where monitoring pupil behaviour is similarly deprioritized, suggesting it might not be given the attention it requires to maintain high teaching and learning standards.

The distribution shows moderate attention to professional development for teachers, with 39.0 percent of pupils in schools where teacher training is considered important but not top priority, rated fourth. Nearly a quarter (23.8%) attend schools where leadership development for school heads is rated as least important which may have implications for the quality of management these pupils' schools receive. These findings suggest that while many Seychelles pupils benefit from schools with strong educational priorities, others may be in schools where certain management activities receive insufficient attention.

5.6 Pupils Behavioural Problems

Behavioural issues disrupt the learning environment, creating an unstable and undisciplined atmosphere within schools. It is crucial for school heads to actively monitor and address these challenges to foster a conducive learning environment. In the SACMEQ III (2007), SACMEQ IV (2013) and SEACMEQ V (2021) studies, school heads were asked to indicate their opinion regarding the prevalence of eighteen specific pupil behaviour occurring in their schools by responding "never", "sometimes" or "often". Table 5.7 details these behaviours and presents data

on the distribution of P6 pupils by region, according to their school heads' rating of the behaviours, sometimes/often combined, occurring in the SACMEQ III (2007), SACMEQ IV (2013) and SEACMEQ V (2021) studies at national level.

Table 5.8 further illustrate this data but for the SEACMEQ V (2021) study at regional level only, similarly, shown in Figures 5.4 and 5.5 but by location and school ownership respectively providing additional insights into their perceived prevalence outlined in Table 5.7.

Table 5.7: Distribution of P6 Pupils by their School Heads' highest opinion rating of pupils' behavioural problems at National Level

Pupils' behavioural problems	SACMEQ III	SACMEQ IV	SEACMEQ V
	%	%	%
Pupil arriving late	99.8	100.0	100.0
Pupil absenteeism	100.0	93.2	100.0
Pupil skipping classes	52.9	53.4	31.4
Pupils dropping out of school	02.4	05.2	11.3
Classroom disturbance by pupils	99.8	100.0	100.0
Cheating by pupils	95.2	86.5	54.3
Use of abusive language by pupils	98.2	100.0	89.9
Vandalism by pupils	85.1	78.7	81.5
Theft by pupils	86.7	97.0	74.2
Bullying of pupils by other pupils	100.0	100.0	100.0
Verbal abuse of staff by pupils	62.7	64.5	62.4
Physical injury to staff by pupils	10.6	00.0	8.7
Sexual harassment of pupils by pupils	62.4	00.0	48.5
Sexual harassment of teachers by pupils	00.0	00.0	0.0
Drug abuse or possession by pupils	04.7	06.2	16.6
Alcohol abuse or possession by pupils	15.8	11.2	9.4
Fights amongst pupils	100.0	100.0	100.0
Pupil health problems	100.0	100.0	100.0

Table 5.8: Distribution of P6 Pupils by their School Heads' highest opinion rating of pupils' behavioural problems by Region

Pupils' behavioural problems	SEACMEQ V (2021)						
	Central	East	Island	North	South	West	Seychelles
	%	%	%	%	%	%	%
Pupil arriving late	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**
Pupil absenteeism	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**
Pupil skipping classes	13.9	79.8	34.5	33.5	38.5	0.0	**31.4**
Pupils dropping out of school	14.9	0.0	28.1	13.8	0.0	0.0	**11.3**
Classroom disturbance by pupils	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**
Cheating by pupils	52.1	44.4	37.4	61.7	100.0	30.4	**54.3**
Use of abusive language by pupils	75.9	100.0	100.0	100.0	100.0	89.3	**89.9**
Vandalism by pupils	75.9	79.8	100.0	60.5	100.0	89.3	**81.5**
Theft by pupils	75.9	57.9	100.0	74.9	100.0	38.6	**74.2**
Bullying of pupils by other pupils	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**
Verbal abuse of staff by pupils	61.0	79.8	34.5	33.5	80.7	89.3	**62.4**
Physical injury to staff by pupils	0.0	24.9	0.0	0.0	19.3	23.6	**8.7**
Sexual harassment of pupils by pupils	52.1	0.0	28.1	33.5	100.0	89.3	**48.5**
Sexual harassment of teachers by pupils	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Drug abuse or possession by pupils	0.0	0.0	28.1	33.5	80.7	0.0	**16.6**
Alcohol abuse or possession by pupils	13.9	0.0	0.0	0.0	38.5	0.0	**9.4**
Fights amongst pupils	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**
Pupil health problems	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**

Figure 5.4: Distribution of P6 Pupils by their School Heads' highest opinion rating of pupils' behavioural problems by Location

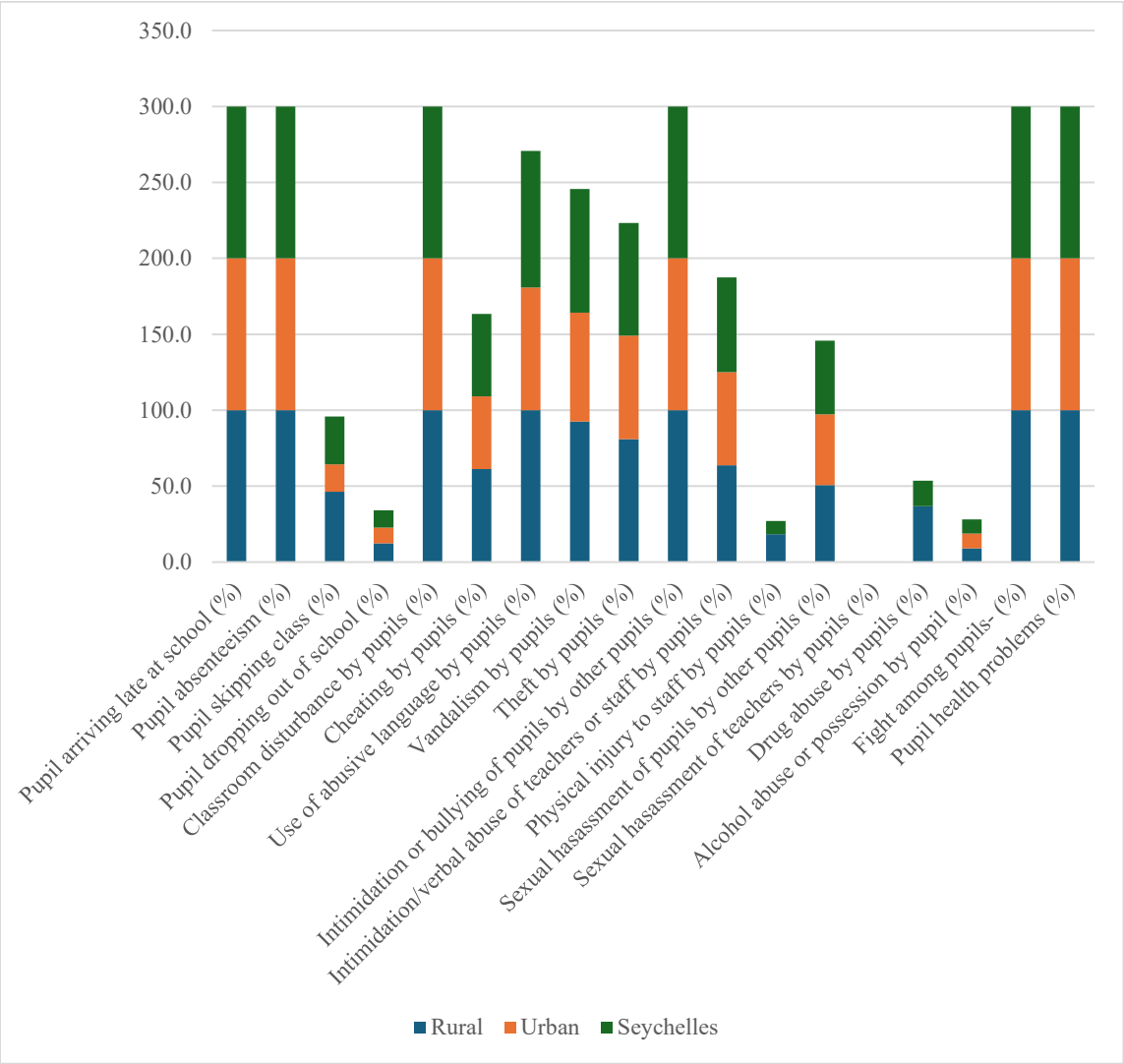
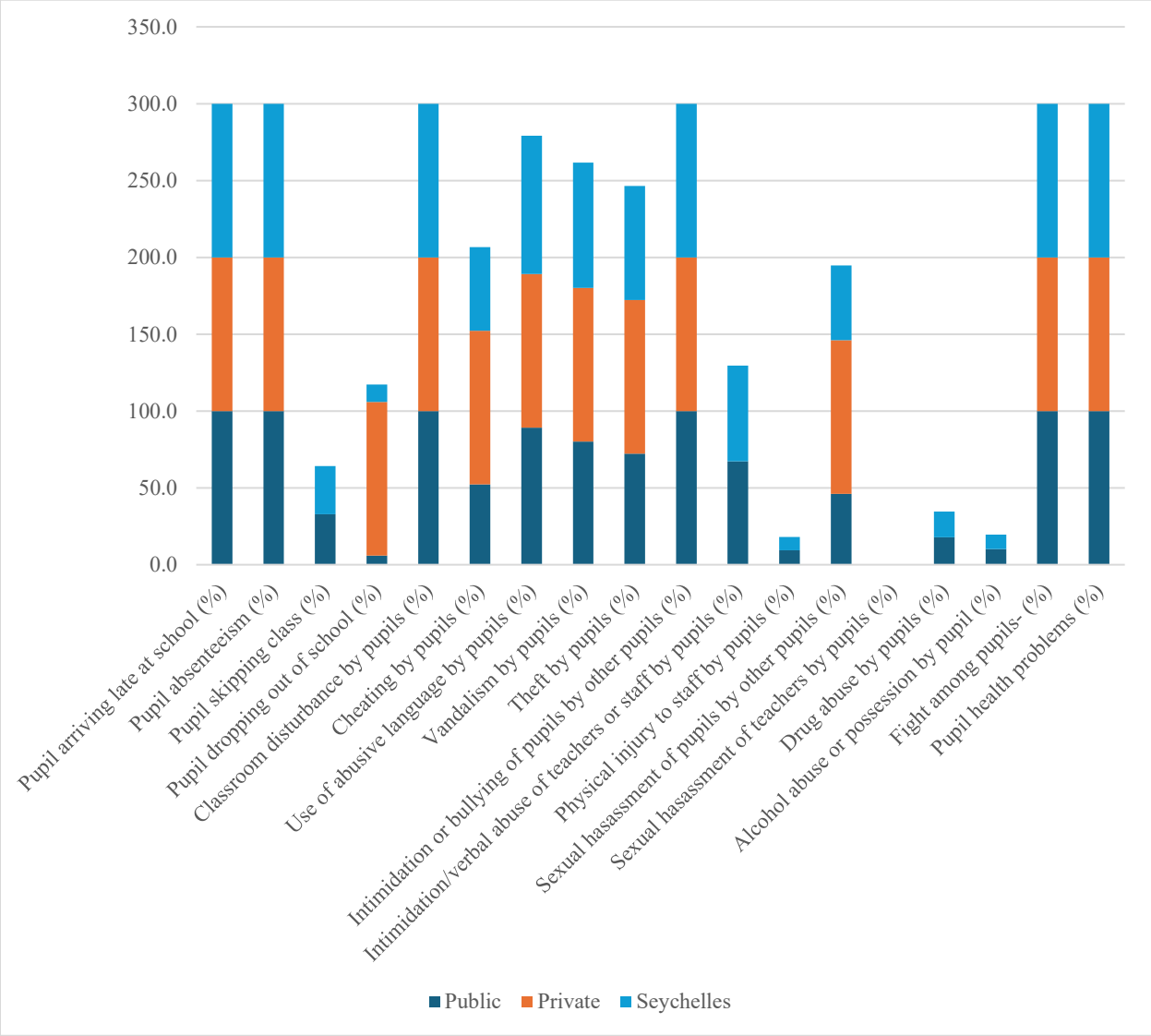


Figure 5.5: Distribution of P6 Pupils by their School Heads' highest opinion rating of pupils' behavioural problems by School Ownership



5.6.1 Opinion of School Heads on Frequency of P6 Pupils' Behavioural Problems at National level

The distribution of P6 pupils across schools were school heads reported persistent behavioural problems remained high over the three SACMEQ/SEACMEQ periods. Issues such as pupil lateness, absenteeism, classroom disturbances, bullying and fights among pupils were nearly universally reported.

Severe problems showed concerning trends. The proportion of P6 pupils in schools where school heads reported dropout rates increased from 2.4 percent in SACMEQ III to 11.3 percent in SEACMEQ V, while drug abuse rose from 4.7 percent to 16.6 percent. These increases highlight emerging challenges that require urgent attention to prevent escalation.

Fluctuations were observed in absenteeism, vandalism and theft, indicating the need for continuous monitoring and adaptive strategies to address them. Pupil absenteeism was reported in all schools in SACMEQ III and SEACMEQ V, while it dropped to 93.2 percent in SACMEQ IV. Vandalism decreased from 85.1 percent in SACMEQ III to 78.7% in SACMEQ IV before rising to 85.1 percent in SEACMEQ V. Theft peaked at 97.0 percent in SACMEQ IV before dropping to 74.2 percent in SEACMEQ V. In contrast, the proportion of P6 pupils in schools where cheating was reported decreased significantly from SACMEQ III (95.2%) to SEACMEQ V (54.3%).

5.6.2 Distribution of P6 Pupils by Region based on Their School Heads' Reports of Behavioural Problems

The distribution of P6 pupils across regions shows universal reporting of certain behavioural issues in all schools. All P6 pupils in Seychelles attend schools where lateness, absenteeism, classroom disturbances, bullying, fights and health problems are reported, indicating these challenges affect pupils nationwide.

Regional variations reveal more severe patterns. In the Central region, 75.9 percent of P6 pupils attended schools reporting the use of abusive language, vandalism and theft, while 61 percent are in schools noting verbal abuse of staff and 52.1 percent attend schools reporting cheating and sexual harassment of pupils by pupils. The East region shows all P6 pupils attend schools reporting the use of abusive language, with 79.8 percent in schools that also note skipping classes, verbal abuse and vandalism. 100.0 percent of P6 pupils in the Island region were in schools reporting a prevalence of vandalism, theft and abusive language, while those in the North region attended schools reporting abusive language (100.0%), theft (74.9%), cheating (61.7%) and vandalism (60.5%). Particularly concerning is the South region, where P6 pupils are in schools reporting severe problems, with eleven (11) out of eighteen (18) issues at 100.0 percent, including drug abuse (80.7 percent), highlighting critical areas needing intervention. The West region mirrored national trends where P6 pupils attend schools reporting high prevalence rates including other

issues such as use of abusive language, vandalism, sexual harassment of pupils by pupils and verbal abuse of staff by pupils (all at 89.3 percent). Noteworthy, the West region presents a unique case as the only region where no P6 pupils attend schools reporting skipped classes.

5.6.3 Distribution of P6 Pupils by Location based on Their School Heads' Reports of Behavioural Problems

The location-based distribution shows all P6 pupils nationally attend schools reporting universal behavioural issues such as arriving late, absenteeism, classroom disturbances, bullying and health issues. However, 81.5 percent of P6 pupils are in schools reporting vandalism, 74.2 percent in schools noting theft, and 54.3 percent in schools observing cheating. Other issues show lower prevalence, with only 11.3 percent of pupils in schools reporting dropouts, 9.4 percent in schools noting alcohol abuse, and 8.7 percent in schools observing physical injury to staff by pupils.

Rural-urban comparisons reveal that P6 pupils in rural areas generally face more behavioural challenges, except for alcohol abuse where urban pupils slightly surpass their rural counterparts (9.7% vs 9.0%).

5.6.4 Distribution of P6 Pupils by School Ownership based on Their School Heads' Reports of Behavioural Problems

All P6 pupils, whether in public or private schools, attend institutions reporting universal issues such as arriving late, absenteeism, classroom disturbances and bullying. However, 89.2 percent of pupils in public schools are in schools reporting the use of abusive language compared to lower rates in private schools, similar to vandalism (80.1% percent of pupils), theft (72.3% percent of pupils), cheating (52.3% percent of pupils) and skipping classes (32.8% percent of pupils).

Notably, the percentage of private school pupils attending institutions reporting dropouts (94.0%), cheating (47.7%), vandalism (19.9%), theft (27.7%), sexual harassment of pupils by other pupils (53.8%), exceed the public school's rate. Private schools show complete absence (0.0%) of certain severe issues like skipping classes, physical injury to staff by pupils, sexual harassment of teachers by pupils and drug and alcohol abuse or possession.

Policy Suggestion 5.3: Develop and implement a Behavioural Support Programme with targeted interventions addressing behavioural problems.

5.7 Teachers Behavioural Problems

Staff management is a crucial aspect of the leadership responsibilities of the school head, playing a significant role in advancing the school and achieving higher standards. According to the Handbook for School Leadership and Management (Department of Education, 2010), the school head, as the driving force, sets high standards and balances pressure with support, and expectations with realism.

This section examines the distribution of P6 pupils across schools where school heads reported on teacher behavioural problems over SACMEQ III, SACMEQ IV and SEACMEQ V. It is important to note that these findings reflect the school heads' personal experiences in dealing with these issues occasionally or frequently, without indicating the number of teachers involved or the pervasiveness of problems.

The analysis focuses on eleven behavioural issues, including absenteeism, health problems, skipping classes and alcohol abuse. Table 5.9 details the distribution of P6 pupils across schools based on these behaviours at the national level, while Table 5.10, Figures 5.6 and 5.7 provide insights by region, location and school ownership.

Table 5.9: Distribution of P6 Pupils by Their School Heads' Reports of Teachers' Behavioural Problems at National Level

Teachers' behavioural problems	SACMEQ III	SACMEQ IV	SEACMEQ V
	%	%	%
Teacher arriving late	99.9	100.0	95.7
Teacher absenteeism	93.3	82.0	76.2
Teacher skipping classes	20.9	31.5	37.4
Bullying of pupils by teachers	76.4	85.7	61.4
Sexual harassment of teachers by other teachers	00.0	00.0	0.0
Sexual harassment of pupils by teachers	00.0	00.0	0.0
Use of abusive language by teachers	50.8	63.5	47.1
Drug use by teachers	00.0	12.8	0.0
Alcohol abuse by teachers	11.7	03.4	22.9
Teacher health problems	100.0	100.0	95.7
Conflict between parents and teachers	-	89.8	84.4

Table 5.10: Distribution of P6 Pupils by Their School Heads' Reports of Teachers' Behavioural Problems by Region

Teachers' behavioural problems	SEACMEQ V (2021)						
	Central	East	Island	North	South	West	Seychelles
	%	%	%	%	%	%	%
Teacher arriving late	100.0	75.1	100.0	100.0	100.0	100.0	**95.7**
Teacher absenteeism	75.9	75.1	71.9	86.8	100.0	49.3	**76.2**
Teacher skipping classes	40.4	0.0	100.0	0.0	80.7	0.0	**37.4**
Bullying of pupils by teachers	47.1	33.0	100.0	61.7	100.0	74.3	**61.4**
Sexual harassment of teachers by other teachers	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Sexual harassment of pupils by teachers	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Use of abusive language by teachers	61.0	0.0	37.4	61.7	80.7	38.6	**47.1**
Drug use by teachers	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Alcohol abuse by teachers	11.7	33.0	37.4	33.5	38.5	0.0	**22.9**
Teacher health problems	100.0	75.1	100.0	100.0	100.0	100.0	**95.7**
Conflict between parents and teachers	75.9	100.0	100.0	73.1	100.0	74.3	**84.4**

Figure 5.6: Distribution of P6 Pupils by Their School Heads' Reports of Teachers' Behavioural Problems by Location

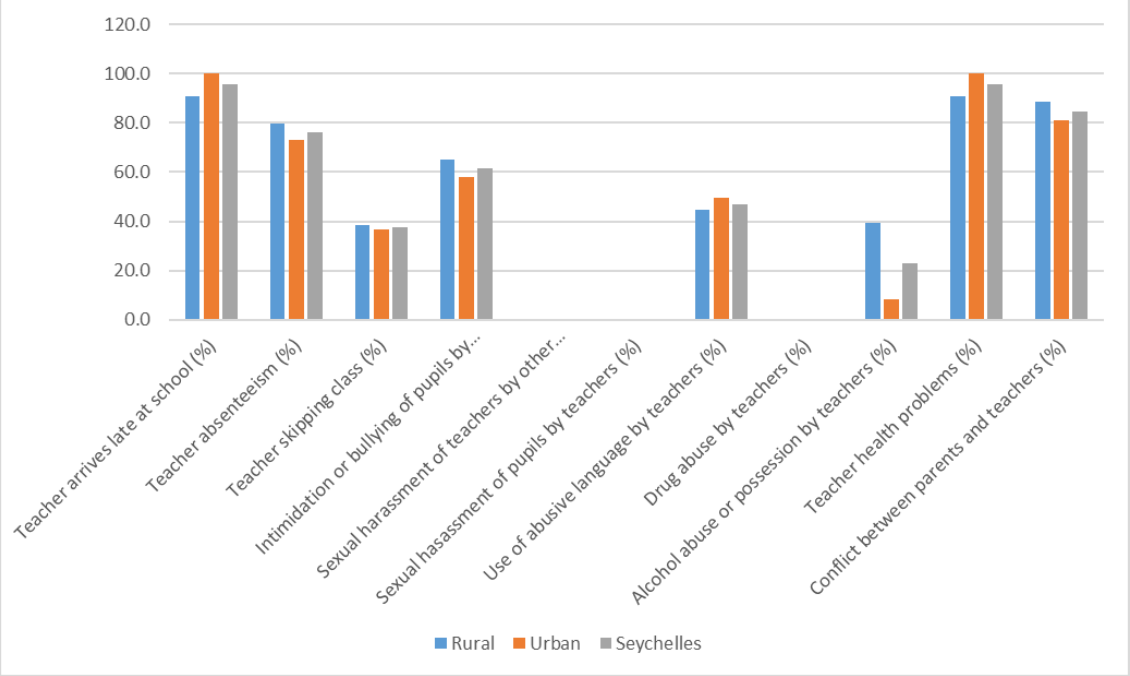
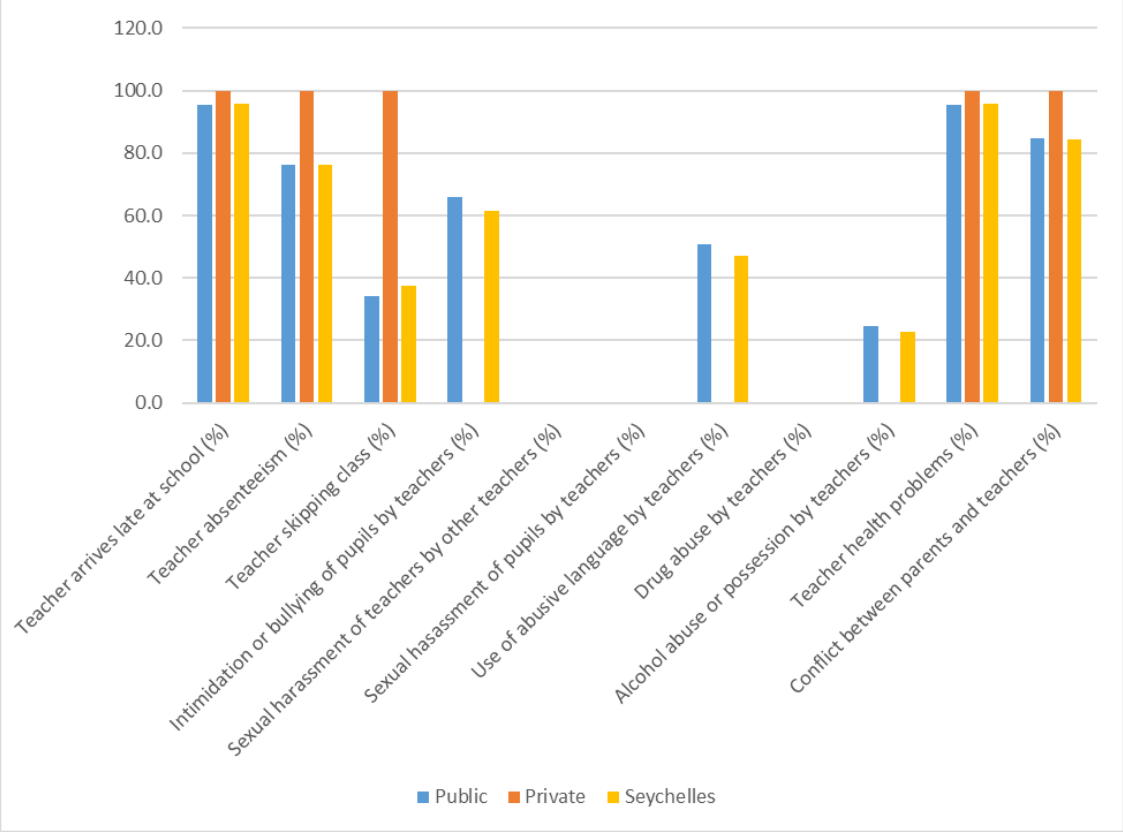


Figure 5.7: Distribution of P6 Pupils by Their School Heads' Reports of Teachers' Behavioural Problems by School Ownership



5.7.1 Distribution of P6 Pupils by Their School Heads' Reports of Teacher Behavioural Problems at National level

The proportion of P6 pupils in schools reporting teacher absenteeism has declined from 93.3 percent in 2007 to further 76.2 in 2021, corresponding a slight drop in the proportion of P6 pupils in schools reporting teacher health problems (100.0% to 95.7%). However, the proportion of pupils in schools reporting skipping classes have increased from 20.9 percent to 37.4 percent during the same period. Most concerning is the sharp increase in pupils attending schools reporting teacher alcohol abuse, from 3.4 percent in 2013 to 22.9 percent in 2021.

Positive trends include fewer pupils in schools reporting teacher bullying (down 85.7% in 2007 to 61.4% in 2021) and abusive language (peaked at 63.5% in 2013 but declined to 47.1% in 2021). Pupils in schools reporting other issues, such as arriving late (95.7%) and conflicts with parents (84.4%), slightly improved, while sexual harassment remained at 0.0 percent across all periods.

5.7.2 Distribution of P6 Pupils by Frequency of Teachers' Behavioural Problems by Region

The distribution of P6 pupils across Seychelles reveals significant patters in teacher behavioural problems at the national level. Among P6 pupils, 95.7 percent are taught by teachers who arrive late or have health problems, while 84.4 percent have teachers experiencing conflict with parents, and 76.2 percent are affected by teacher absenteeism. Notably, no P6 pupils (0.0%) were reported to have teachers involved in sexual harassment of both pupils and teachers or drug use, indicating these issues were not observed in the primary schools.

Regional analysis shows all P6 pupils in the Central, North, South and West regions (100.0%) are taught by teachers arriving late. The distribution of teacher absenteeism among P6 pupils varies, ranging from 49.3 percent in the West to 100.0 percent in the South. For skipping classes, all P6 pupils in the Island region (100.0%) and 80.7 percent in the South region are affected. Bullying by teachers impact all P6 pupils in the Island and South regions (100.0%) but only 33.0 percent in the East region. The use of abusive language by teachers affects no P6 pupils in the East region but reaches 80.7 percent in the South. Alcohol abuse by teachers, while nationally affecting 22.9 percent of P6 pupils, shows regional concentrations with 38.5 percent in the South and 33.0 percent in the East, suggesting these regions require specific interventions.

5.7.3 Distribution of P6 Pupils by Frequency of Teachers' Behavioural Problems by Location

The distribution of P6 pupils by school location reveals that all P6 pupils (100.0%) in schools from urban areas experienced teacher lateness and health problems, compared to 90.9 percent in schools from rural areas. However, schools in rural areas show higher percentages of P6 pupils affected by teacher absenteeism (79.8% compared to 73% in schools in urban areas) and parent-teacher conflicts (88.6% versus 80.9%). Schools in urban areas report abusive language affecting 49.4 percent of P6 pupils, slightly higher than the 44.6 in schools from rural areas. Conversely, intimidation or bullying of pupils impacts 65.0 percent of P6 pupils in schools from rural areas compared to 58.1 percent in schools from urban areas. The most striking urban-rural disparity appears in alcohol abuse, affecting 39.2 percent of P6 pupils in rural schools versus only 8.2 percent in urban schools, indicating this as a particular challenge for rural education environments.

5.7.4 Distribution of P6 Pupils by School Ownership Based on Their School Heads' Reports of Teacher Behavioural Problems

For 2021, all private school pupils attended institutions reporting lateness, absenteeism and skipping classes. The distribution of public-school pupils showed slightly better but still concerning rates, with 95.3 percent in schools reporting lateness and health problems, and 76.2 percent reporting absenteeism. Public school pupils are more likely to be in schools reporting conflicts with parents (84.9%), bullying (66.1%) and abusive language (50.8%). Notably, no pupils attend schools reporting teacher drug use or sexual harassment regardless of school ownership.

Policy Suggestion 5.4: Implement enhanced teacher professional development and support programmes to address the teacher behavioural problems.

5.8 Community Contributions to School Management

Research underscores the importance of connecting schools with parents and the community. Whilst the Ministry of Education has strived to ensure equitable provisions for schools, there has been a gradual shift towards encouraging community participation in school life (SACMEQ IV, 2013). According to the Handbook for School Leadership and Management, schools are accountable to parents, guardians and the community. Besides reporting on pupils' progress, school management and staff must actively collaborate with parents and the community in the teaching and learning process to foster effective schooling (Department of Education, 2010).

This section assesses the status and trends of community links with schools based on the SEACMEQ V (2021) study, focusing on the distribution of P6 pupils across different levels of community participation. School heads were presented with fourteen (14) activities to evaluate community engagement. These activities included:

1. Building of schools,
2. Maintenance of school facilities
3. Construction / maintenance and repair of furniture,
4. Purchase of Textbook
5. Purchase of Stationery
6. Purchase of Other school supplies
7. Payment of Examination fees

8. Payment of the Salaries of additional teachers
9. Payment of an additional amount on top of normal salaries of teachers
10. Payment salaries of non-teaching staff
11. Payment of an additional amount on top of normal salaries of non-teaching staff
12. Extra-curricular activities including school trips
13. Assisting teachers in teaching/pupil supervision without pay
14. Provision of school meals

Figures 5.8, 5.9 and 5.10 illustrates the distribution of P6 pupils by community contributions to school management across regions, location and school ownership.

Figure 5.8: Distribution of P6 Pupils by contributions of the community to school management by Region

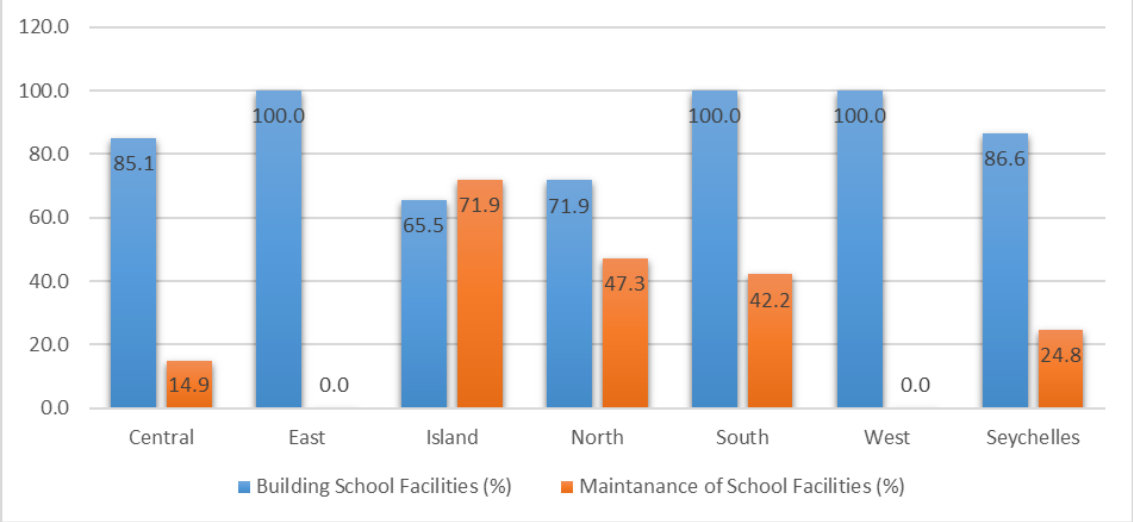


Figure 5.9: Distribution of P6 Pupils by contributions of the community to school management by Location

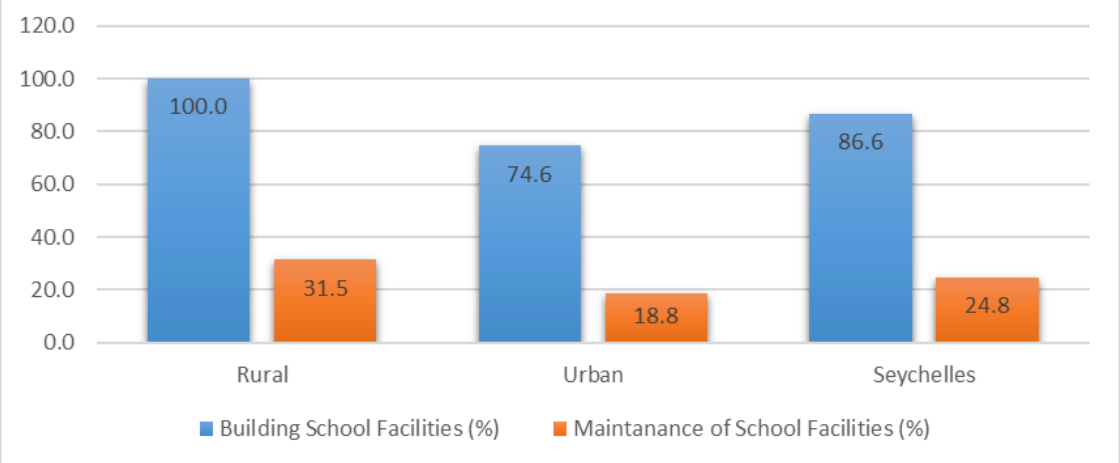
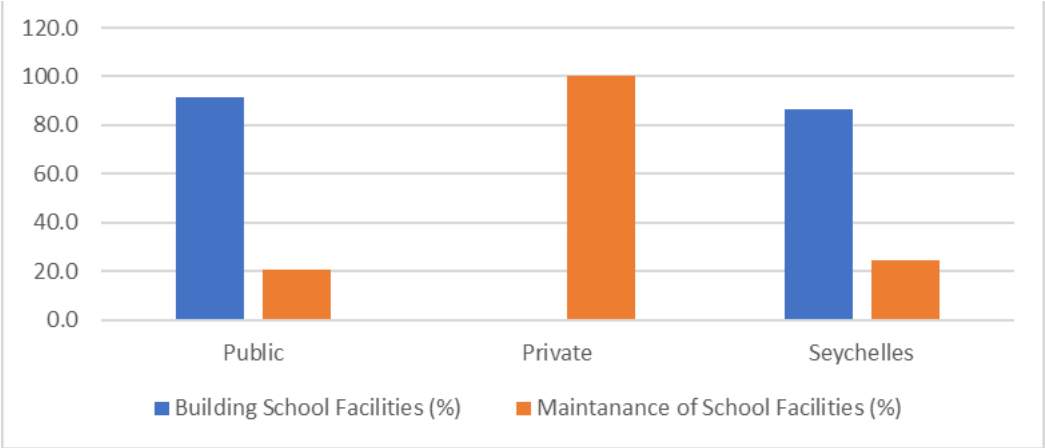


Figure 5.10: Distribution of P6 Pupils by contributions of the community to school management by School Ownership



5.8.1 Distribution of P6 Pupils by Community Contributions of the Community to School Management

Community participation is essential for effective schooling. While the Ministry ensures equitable provisions, community involvement has declined. Of the fourteen activities assessed, only building and maintaining school facilities showed non-zero participation among P6 pupils' schools, reflecting a complete drop from SACMEQ III and IV. This decline may stem from the Ministry's role in infrastructure maintenance (Functions Manual, 2021).

The East, South and West regions reported 100.0 percent participation among P6 pupils' schools in building facilities, while the Island region recorded the lowest rate at 65.5 percent. However, for maintaining facilities, the Island region led with 71.9 percent involvement, whereas the East and West regions reported no community participation. Rural-urban disparities were also evident. The distribution of P6 pupils' schools from rural areas showed full community participation in building facilities, compared to 74.6 percent in urban areas. Similarly, for maintenance activities, rural areas led with 31.5 percent of P6 pupils' schools' involvement, while those from urban areas lagged at 18.8 percent. Public schools had high community involvement in building facilities (91.5% of P6 pupils' schools), while private schools reported no involvement (0.0% of P6 pupils' schools) in building but full involvement (100.0%) in maintenance, reflecting differing funding models. These trends indicate the need for targeted policies to address the disparities and ensure balanced support for school infrastructure development.

Policy Suggestion 5.5: Implement a comprehensive policy to empower school councils to actively enhance community participation in schools.

Conclusion

The analysis of schools serving P6 pupils in Seychelles from 2007 to 2021 reveals notable trends. By 2021, among schools with P6 pupils, school heads have aged to a mean of 52.6 years, with male heads and those in urban schools generally older than their female and rural counterparts. The predominance of female leadership in P6 schools increased from 82.8 to 96.4 percent during this period, particularly evident in urban areas and public schools, suggesting the need for gender balance policies in school leadership. While most P6 schools' benefit from highly qualified heads holding tertiary qualifications, regional disparities in qualifications point to areas needing improvement. Furthermore, the distribution of P6 pupils whose school heads have received management training has increased, though years of management experience have decreased.

Behavioural challenges affecting P6 pupils persist across Seychelles, with lateness, absenteeism and classroom disturbances remaining prevalent. More concerning are emerging school problems like increased school dropouts and drug abuse among P6 pupils, particularly in the Central region where lateness, absenteeism and bullying are concentrated, and in the South where cheating and drug abuse are most acute. Rural schools serving P6 pupils report higher incidences of behavioural problems compared to their urban counterparts, necessitating tailored interventions. Teacher-related challenges in P6 schools show mixed trends, with improvements in absenteeism and health problems offset by rising cases of skipping classes and alcohol abuse. These issues are particularly pronounced in schools serving P6 pupils in the South and Island regions, where teacher bullying and substance abuse require targeted attention.

While infrastructure improvements have benefited many P6 schools, disparities persist in building conditions and facilities across regions. Community participation in P6 schools varies considerably, with rural and public schools demonstrating stronger involvement in facility development and maintenance compared to urban and private schools. These findings collectively highlight the need for comprehensive strategies addressing leadership development, behavioural challenges, teacher support and community engagement to enhance the educational environment for all P6 pupils in Seychelles.

Chapter 6: Educational Resources

6.1 Introduction

This chapter examines the distribution of educational resources among P6 pupils for school systems in the Seychelles with the aim to improve the conditions and quality of education. It is part of the responsibility of the Ministry of Education to ensure that pupils and teachers have adequate access to the most modern facilities, equipment and teaching and learning materials. However, limited funding often affects resource availability, requiring careful planning to ensure efficient and effective provision of educational resources for schools.

To guide decision-making, the Ministry uses systematic indicators to ensure the accurate assessments of:

(a) resource levels which measure the availability of educational resources for P6 pupils within schools, and

(b) resource trends which track changes in the availability of educational resources that may have occurred in a given period of time.

First, resources were categorized into "*essential classroom resources"* and "*desirable physical and human resources*". Second, the distribution of these resources among P6 pupils was evaluated against SEACMEQ benchmark standards.

6.2 Resource Categories

Educational Resources were considered into two categorical groups to assess their distribution among P6 pupils: "*essential classroom resources"* and "*desirable physical and human resources*". These two groups were further categorized into groups containing 36 resource indicators. Table 6.1 summarizes the essential classroom resources for P6 pupils for SEACMEQ V, while Table 6.2 provides a similar breakdown for desirable physical and human resources.

Table 6.1: Availability of "Essential Classroom Resources" for P6 pupils

Essential classroom resources	
Definition	Basic elements of the classroom educational environment. It was considered that these kinds of resources represented pre-requisites for pupil learning in the sense that the absence of any single one of them was likely to prevent pupils from participating effectively in lessons.
Categorical Groups	Essential classroom resources were considered in two groups: a. *Teaching and Learning materials* b. *Equipment and Facilities*
Teaching and Learning materials Indicators	1. Teacher's Guide English 2. Teacher's Guide Mathematics 3. Reading Teacher English Dictionary 4. Exercise Book, Pen, Pencil, or Ruler 5. Own Reading Textbook 6. Own Maths Textbook
Equipment and Facilities Indicators	1. Writing Board 2. Pupil Sitting and Writing Place 3. Teacher Table and Chair 4. Library (Class, School or Both) 5. School-Radio 6. School-Water

Table 6.2.: Availability of "Desirable Physical and Human Resources" for P6 pupils

Desirable physical and human resources	
Definition	Important enhancements to the educational environment. It was considered that these kinds of resources were additional to the essential resources that focused on enhancements to the educational environment that is likely to improve both the general conditions of schooling and the quality of education.
Categorical Groups	Desirable physical resources were considered in two groups: a. *Buildings* *b. Equipment and Facilities* Desirable human resources were considered in three groups: a. *School heads* b. *Teachers* c. *Environment*
Buildings Indicators	1. Buildings Condition 2. Head Office 3. Staff Room 4. School-Hall

Equipment and Facilities Indicators	1. Class Cupboard 2. Class Bookshelf 3. Fence 4. Television 5. School-Photocopier 6. Sports Ground 7. Electricity 8. Computer
School heads Indicators	1. School Head 2. Academic Training 3. Management Training 4. HIV-AIDS Training
Teachers Indicators	1. Reading Teacher 2. Pre-Service Training 3. In-Service Training 4. HIV-AIDS Training 5. Teacher Subject Knowledge (Read) 6. Teacher Subject Knowledge (Math)
Environment Indicators	1. Class Size 2.Teacher Attendance

6.3 "Benchmark Standard" for Resource Coverage

In Seychelles, the Ministry of Education assess its resource coverage in schools against a "Benchmark Standard" of 85 percent, meaning at least 85 percent of P6 pupils should have access to the 36 resources. This standard accounts for factors such as expansions in enrolment, construction of new classrooms and schools, and the realities of financial constraints.

The Research Teams also used colour-codes to facilitate the interpretation of resource coverage statistics against the benchmark standard. Figures in red denote resources that were below the 85 percent coverage of P6 pupils.

6.4 Essential Classroom Resources

6.4.1. Essential Classroom Resources - Teaching and Learning Materials

Table 6.3 shows the percentages of P6 pupils and teachers in Seychelles that had access to six essential classroom resources (Teaching and Learning materials) for SEACMEQ V by Region, while Table 6.4 tracks trends for the past four SACMEQ/SEACMEQ studies.

Table 6.3: Distribution of P6 Pupils by Essential Teaching and Learning Materials and Region for 2021

2021	Teacher's Guide English	Teacher's Guide Mathematics	Reading Teacher English Dictionary	Exercise Book, Pen, Pencil, or Ruler	Own Reading Textbook	Own Math Textbook
	%	%	%	%	%	%
Central	88.3	91.0	100.0	98.2	62.9	70.1
East	100.0	71.0	100.0	96.6	61.2	56.6
Island	100.0	85.9	100.0	98.2	83.7	76.8
North	100.0	100.0	100.0	95.8	55.5	43.6
South	100.0	100.0	100.0	98.5	70.5	70.8
West	100.0	80.2	100.0	97.1	60.6	66.7
Seychelles	**95.4**	**88.3**	**100.0**	**97.5**	**64.8**	**65.0**

Table 6.4: Distribution of P6 Pupils by Essential Teaching and Learning Materials from 2000 to 2021

Years	Teacher's Guide English	Teacher's Guide Mathematics	Reading Teacher English Dictionary	Exercise Book, Pen, Pencil, or Ruler	Own Reading Textbook	Own Maths Textbook
	%	%	%	%	%	%
2021	95.4	88.3	100.0	97.5	64.8	65.0
2013	18.9	74.6	100.0	97.3	39.5	52.1
2007	90.2	75.4	98	97.8	42.3	62.8
2000	92.7	48.3	99.1	86.7	46.9	75.6

In 2021, most of the '*teaching and learning materials'* were above the national benchmark of 85 percent. For example, 100 percent of P6 pupils had teachers with dictionaries, 95.4 percent had access to Teacher's guide English, 97.5 percent had basic stationary like exercise book, pen, pencil

or ruler and 88.3 percent had Teacher guide Mathematics. On the other hand, P6 pupils having access to their own Reading Textbook and own Math Textbook lagged below the required national benchmark at 64.8 and 65 percent respectively.

The trends throughout the years indicate similar patterns for teachers of P6 pupils having majority of the six '*teaching and learning materials'* resources, whereby '*Teacher dictionary*' and '*exercise book, pen, pencil or ruler*' satisfied the national benchmark. In contrast, the figures for the '*Teacher's Guide Mathematics*', '*Own Reading Textbook*', and '*Own Math Textbook*' have consistently fallen below the required SACMEQ benchmark standard over the years. Although, in SEACMEQ V the results for '*Teacher's guide Mathematics*' showed an improvement, the results remained more or less consistent in the previous years. Similarly, for '*Teacher's Guide English*', the results for the distribution of the P6 pupils over the past four SACMEQ / SEACMEQ studies, except for SACMEQ IV at 18.9 percent, satisfied the 85 percent benchmark.

This reflects a positive shift in ensuring P6 pupils have access to their own textbooks. Additionally, the access to the 'Teacher's Guide Mathematics' has seen an upward trend, with over 85% of P6 pupils being taught by Math teachers now having access to this valuable resource.

6.4.2. Essential Classroom Resources – Equipment and Facilities

Table 6.5 shows the percentages of Primary Six pupils in Seychelles whose teachers had access to six essential classroom resources (*Equipment and Facilities*) for SEACMEQ V by Region. Table 6.6 shows the percentages of Primary Six pupils in Seychelles whose teachers had access to the six *Equipment and Facilities* for the past four SACMEQ/SEACMEQ studies.

Table 6.5: Distribution of P6 pupils by Essential Equipment and Facilities and Region for 2021

SEACMEQ V (2021)	Writing Board	Pupil Sitting and Writing Place	Teacher Table and Chair	Library (Class, School or Both)	School-Radio	School-Water
	%	%	%	%	%	%
Central	100.0	95.9	100.0	100.0	100.0	75.9
East	100.0	95.9	100.0	100.0	100.0	100.0
Island	100.0	100.0	100.0	100.0	100.0	100.0
North	100.0	96.4	100.0	100.0	88.6	100.0
South	100.0	96.2	100.0	100.0	100.0	100.0
West	100.0	94.9	100.0	100.0	100.0	100.0
Seychelles	**100.0**	**96.4**	**100.0**	**100.0**	**98.6**	**91.1**

Table 6.6: Distribution of P6 Pupils by Essential Equipment and Facilities from 2000 to 2021

SEACMEQ V (2021)	Writing Board	Pupil Sitting and Writing Place	Teacher Table and Chair	Library (Class, School or Both)	School-Radio	School-Water
	%	%	%	%	%	%
SEACMEQ V (2021)	100.0	96.4	100.0	100.0	98.6	91.1
SACMEQ IV (2013)	100.0	98.5	100.0	100.0	100.0	100.0
SACMEQ III (2007)	98	100.0	98	100.0	100.0	100.0
SACMEQ II (2000)	94.7	100.0	97	100.0	100.0	100.0

The results for SEACMEQ V highlight significant progress with all six key resources—writing board, pupil sitting and writing place, teacher table and chair, library, school radio, and school water—meeting the 85% national benchmark. Three resources (writing boards, teacher tables, and libraries) achieved 100 percent coverage for P6 pupils across all regions.

When compared to previous SEACMEQ/SACMEQ studies, particularly in aligning resource distribution with policy requirements. While challenges persist in some areas, the overall trend indicates that P6 pupils in SEACMEQ V had access to essential facilities than in previous years. Continued efforts can address these remaining disparities and ensure all P6 pupils benefit from a fully resourced learning environment.

Policy Suggestion 6.1: The Ministry of Education through the Institutional Support Division should:

- Strengthen the monitoring of textbook procurement to address any identified gaps and ensure all pupils have access to textbooks in a timely and equitable manner.
- Develop strategies for a more technology-enabled education system, facilitating access to digital learning platforms and online educational resources.
- Monitor the procurement, maintenance, and regular assessments of classroom furniture to ensure all pupils have proper sitting and writing places.

6.5 Desirable physical and human resources

6.5.1. Desirable physical and human resources - Building

Table 6.7 contains the percentages of Primary Six pupils in Seychelles schools that have the four identified desirable physical resources (buildings) for SEACMEQ V by Region. Table 6.8 shows the percentages of Primary Six pupils in Seychelles schools that have the four identified desirable physical resources for the past four SACMEQ/SEACMEQ studies.

Table 6.7: Distribution of P6 Pupils by Building Resources and Region for 2021

SEACMEQ V (2021)	Good School Buildings Condition	School Head Office	School-Staff Room	School-Hall
	%	%	%	%
Central	88.3	100.0	100.0	26.6
East	100.0	100.0	100.0	75.1
Island	71.9	100.0	100.0	71.9
North	100.0	100.0	100.0	38.3
South	61.5	100.0	100.0	19.3
West	25.7	100.0	85.0	89.3
Seychelles	**80.5**	**100.0**	**98.4**	**48.0**

Table 6.8: Distribution of P6 Pupils by Building Resources from 2000 to 2021

Year	Good School Buildings Condition	School Head Office	School-Staff Room	School-Hall
	%	%	%	%
SEACMEQ V (2021)	80.5	100.0	98.4	48.0
SACMEQ IV (2013)	72.8	100.0	95.6	42.5
SACMEQ III (2007)	77.2	100.0	100.0	27.3
SACMEQ II (2000)	62.1	97.9	100.0	15.8

The distribution of P6 pupils across building resources reveal that in SEACMEQ V, all P6 pupils (100%) had school heads with a school head office, while 98.4 percent attended schools with staff rooms, both exceeding the national benchmark standard. However, only 80.5 percent of P6 pupils were in schools with good school buildings conditions and merely 48 percent were in schools having a school hall. Regional disparities were evident, with three regions, Island (71.9%), South (61.5%) and West (25.1%) falling below the benchmark standard for good school building

conditions. The West region stood out positively with 89.3 percent of P6 pupils attending schools with a 'school hall'.

Table 6.8 demonstrates gradual improvements over time in building conditions and school hall availability, though gaps remain that require targeted infrastructure investments to ensure equitable access for all P6 pupils.

Policy Suggestion 6.2:
Review the policy and or guideline on '*Procedures for request of Major works at Headquarters and Educational Institutions*' (June 2011) to systematically enhance the scope of financial resources available for renovation projects on schools.

6.5.2 Desirable physical and human resources – Equipment and Facilities

Table 6.9 shows the percentages of Primary Six pupils in Seychelles schools that have the ten desirable physical resources (*Equipment and Facilities*) for SEACMEQ V by Region. Table 6.10 contains the percentages of Primary Six pupils in Seychelles schools that have the six desirable physical resources for the past four SACMEQ/SEACMEQ studies.

Table 6.9: Distribution of P6 Pupils by Equipment and Facilities by Region for 2021

SEACMEQ V (2021)		Central	East	Island	North	South	West	Seychelles
Class Cupboard Reading	%	95.6	95.6	95.6	95.6	95.6	95.6	**95.6**
Class Cupboard Mathematics	%	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**
Class Bookshelves Reading	%	89.9	89.9	89.9	89.9	89.9	89.9	**89.9**
Class Bookshelves Mathematics	%	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**
Sports/ Playground	%	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**
School Fence	%	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**
Electricity	%	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**
Television	%	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**
Photocopier	%	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**
Computer	%	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**

Table 6.10: Distribution of P6 Pupils by Equipment and Facilities from 2000 to 2021

Years	Sports/ Play Ground	School Fence	Electricity	Television	Photocopier	Computer
	%	%	%	%	%	%
SEACMEQ V (2021)	100.0	100.0	100.0	100.0	100.0	100.0
SACMEQ IV (2013)	87.6	92.2	100.0	100.0	100.0	100.0
SACMEQ III (2007)	90.7	81.5	100.0	92.7	97.3	100.0
SACMEQ II (2000)	95.7	73.4	100.0	100.0	96.4	97.8

The distribution of P6 pupils in relation to equipment and facilities show that in 2021, all ten measured resources exceeded the 85 percent benchmark nationally. Particularly impressive was the 100 percent coverage achieved across all regions for eight key resources: '*class cupboard mathematics*', '*class bookshelf mathematics*', '*sports/ playground*', '*school fence*', '*electricity*', '*television*', '*photocopier*', and '*computer*'. Table 6.10's historical data confirms consistent improvements, with full coverage for all six resources achieved by 2021. This demonstrates Seychelles' strong commitment to providing P6 pupils with well-equipped learning environments that support effective education.

6.5.3. Desirable physical and human resources – School Heads

Table 6.11 contains the percentages of P6 pupils in schools managed by School Heads with the four specified desirable human resources (School Heads) for SEACMEQ V by Region. Table 6.12 contains similar results for the past four SACMEQ/ SEACMEQ studies.

Table 6.11: Distribution of P6 Pupils by School Heads Qualifications and Regions for 2021

SEACMEQ V (2021)	Female School Heads	School Head Education (Senior Sec. Qualification or better)	School Head with Management Course	School Head has Special Training On HIV&AIDS
	%	%	%	%
Central	100.0	100.0	85.1	64.2
East	100.0	100.0	100.0	78.1
Island	71.9	100.0	100.0	100.0
North	100.0	100.0	60.5	71.9
South	100.0	100.0	100.0	100.0
West	100.0	100.0	89.3	100.0
Seychelles	**96.4**	**100.0**	**87.9**	**79.4**

Table 6.12: Distribution of P6 Pupils by School Heads Qualifications from 2000 to 2021

Year	Female School Heads	School Head Education (Senior Sec. Qualification or better)	School Head with Management Course	School Head has Special Training On HIV&AIDS
	%	%	%	%
SEACMEQ V (2021)	96.4	100.0	87.9	79.4
SACMEQ IV (2013)	84.9	100.0	90.5	71.9
SACMEQ III (2007)	82.8	100.0	78.3	60.7
SACMEQ II (2000)	94	95.4	71.8	xx

The results for SEACMEQ V indicate that 100 percent of P6 pupils were in schools where the school head had a Senior Secondary Qualification or better, while 96.4 percent of P6 pupils had a female school head and 87.9 percent were in schools where the school head had completed a Management Course. However, only 79.4 percent of P6 pupils were in schools where the school head received HIV-AIDS training, falling below the SEACMEQ benchmark. Notably, the Central (64.2%), North (71.9%) and East (78.1%) regions had lower percentages of P6 pupils in schools meeting this benchmark standard.

Over the years, a large majority of P6 pupils have been in schools with school heads holding at least a senior secondary school qualification or better, consistently meeting the 85 percent benchmark. While the percentage of P6 pupils with female school heads fell below the benchmark in 2007 and 2013, the overall trend remained very high across all four SACMEQ/SEACMEQ studies. This suggests a potential gender imbalance in school head appointments affecting P6 pupils' distribution. Additionally, while management training for school heads has improved (reaching 87.9% in 2021 and 90.5% in 2013), HIV-AIDS training remains an area needing improvement to ensure P6 pupils are in schools where school heads meet this benchmark.

6.5.4. Desirable physical and human resources – Teachers

Table 6.13 contains the percentages of P6 pupils taught by teachers with the six desirable human resources (Teachers) for SEACMEQ V by Region. Table 6.14 contains similar results for the past four SACMEQ/SEACMEQ studies.

Table 6.13: Distribution of P6 Pupils by Selected Teacher Characteristics and Regions for 2021

SEACMEQ V (2021)	Female Reading Teachers	In-service Training (Reading Teacher)	Pre-service Training 2 yrs. or more (Reading Teacher)	Special Training (HIV-AIDS Course)	Teachers Subject Knowledge (Read)	Teachers Subject Knowledge (Math)
	%	%	%	%	%	%
Central	92.8	50.3	82.4	26.6	100.0	29.3
East	100.0	32.6	87.6	54.9	75.0	46.7
Island	87.7	71.9	100.0	0.0	100.0	15.4
North	100.0	42.6	100.0	28.1	100.0	42.1
South	100.0	51.4	100.0	0.0	100.0	58.4
West	100.0	11.3	44.3	50.7	100.0	80.2
Seychelles	**95.5**	**46.2**	**86.5**	**28.1**	**95.4**	**38.8**

Table 6.14: Distribution of P6 Pupils by Teacher Qualifications by Regions from 2000 to 2021

Years	Female Reading Teachers	In-service Training (Reading Teacher)	Pre-service Training 2 yrs. or more (Reading Teacher)	Special Training (HIV-AIDS Course)	Teachers Subject Knowledge (Read)	Teachers Subject Knowledge (Math)
	%	%	%	%	%	%
SEACMEQ V (2021)	95.5	46.2	86.5	28.1	95.4	38.8
SACMEQ IV (2013)	95.6	65.6	96.2	58.6	13.7	45.8
SACMEQ III (2007)	98.8	43.3	91.3	xx	81.1	87.9
SACMEQ II (2000)	96.5	61.9	90.8	18.9	91.1	64.7

In SEACMEQ V, teachers with the following characteristics taught a high percentage of P6 pupils: female reading teachers (95.5%), pre-service training (86.5%) and teachers' subject knowledge in reading (95.4%). Noteworthy, the trends for the past four SACMEQ/SEACMEQ studies show that the distribution of P6 pupils with regards to female reading teachers and pre-service training, has

been two areas where Seychelles has done very well in maintaining the benchmark standard. However, only 46.2 percent of P6 pupils had teachers who received in-service training, 28.1 percent had teachers with special training and 38.8 percent had teachers with adequate math subject knowledge, all below the 85 percent benchmark standard.

Trends reveal that P6 pupils' distribution in schools with pre-service trained teachers has consistently met the benchmark. However, gaps exist in mathematics resources, particularly pupil textbooks and teacher guides, which have remained below standard in previous studies. While pre-service training coverage is strong, the low percentage of P6 pupils with in-service trained teachers highlights an area for improvement, particularly in mathematics. Additionally, increasing would help ensure more P6 pupils benefit from educators with this specialized knowledge.

Policy Suggestion 6.3: The Ministry of Education, through the Seychelles Institute of Teacher Education, should develop and implement targeted programs to strengthen its in-service training programs to:

- provide continuing professional development to reading teachers
- improve teachers' mathematics subject knowledge
- increase the number of teachers and school leaders receiving special training in HIV/AIDS prevention education.

6.5.5. Desirable physical and human resources – Environment

Table 6.15 contains the percentages of P6 pupils by three desirable human resources (Environment) for SEACMEQ V by Region. Table 6.16 contains comparable results for the past four SACMEQ/SEACMEQ studies.

Table 6.15: Distribution of P6 Pupils by School Environment and Regions for 2021

SEACMEQ V (2021)	Reading Class Size (Less than 41)	Mathematics Class Size (Less than 41)	Teachers Attend Classes
	%	%	%
Central	100.0	100.0	100.0
East	100.0	100.0	100.0
Island	100.0	100.0	100.0
North	100.0	100.0	100.0
South	100.0	100.0	100.0
West	100.0	100.0	100.0
Seychelles	**100.0**	**100.0**	**100.0**

Table 6.16: Distribution of P6 Pupils by School Environment by Regions from 2000 to 2021

Years	Mathematics Class Size (Less than 41)	Teachers Attend Classes
	%	%
SEACMEQ V (2021)	100.0	100.0
SACMEQ IV (2013)	100.0	79
SACMEQ III (2007)	100.0	89.5
SACMEQ II (2000)	100.0	100.0

The results indicate that 100 percent of P6 pupils across all six regions had access to key resources, fully meeting the 85 percent national benchmark. Over the past SACMEQ/SEACMEQ studies, mathematics class size maintained 100 percent coverage for P6 pupils, while teacher attendance in classes reached 100 percent only in SEACMEQ V and II. The only exception was SACMEQ IV, where this indicator fell below the benchmark.

Conclusion

Over the past four SEACMEQ/SACMEQ studies, P6 pupils in Seychelles have consistently had strong access to resources such as the '*Teacher's guide English', 'Teacher dictionary*' and '*exercise book, pen, pencil or ruler'*. However, resources such as *Teacher's Guide Mathematics and Own Reading and Math Textbooks* have remained below the 85 percent benchmark for P6 pupils.

In SEACMEQ V, most P6 pupils and their teachers had access to essential classroom *equipment and facilities*, with notable improvements in *school building conditions* and the availability of *school halls* over time. All six regions recorded 100 percent coverage for P6 pupils in six of the '*equipment and facilities*' resources: *class cupboard mathematics*, *class bookshelf mathematics*, *sports/ playground*, *school fence*, *electricity*, *television*, *photocopier*, and *computer*.

Additionally, 96.4 percent of P6 pupils had female school heads, 100 percent school head education and 87.9 percent had school heads with Management Course. However, HIV/AIDS training for School Heads lagged. Similarly, 95.5 percent of P6 pupils had female reading teachers, 95.4 percent had teachers with strong reading knowledge and 86.5 percent with pre-service training Concerns remain with in-service training (46.2), special training (28.1%) and teachers' subject knowledge for math (38.8%), all falling short of the 85 percent benchmark for P6 pupils.

Chapter 7: Achievement in Reading, Mathematics and Health Knowledge

7.1 Introduction

This chapter will focus on the levels and trends in achievements of Primary Six pupils and their teachers in both reading and mathematics coupled with a focus on their knowledge of HIV-AIDS and other health topics. Comparisons will be made between the results of SACMEQ II, SACMEQ III, SACMEQ IV and SEACMEQ V to establish whether there has been an improvement in achievements for both pupils and their teachers. The results will be reported in terms of scaled scores and the percentage of pupils, and pupils taught by teachers who have reached the various levels of achievement.

7.1.1 Generating the scores

As was the case for previous years, the Rasch procedures were used to produce the reading, mathematics, and health knowledge scores, and these were subsequently transformed to produce overall SEACMEQ means of 500 and a standard deviation of 100.

7.1.2 The competency levels

The achievements of pupils and teachers in both reading and mathematics are analysed based on eight competency levels. The various levels of competencies were generated during a workshop in the SACMEC II project, agreed upon by a panel of subject experts. Essentially, this was done by arranging the reading test items and the mathematics test items in order of difficulty first, then examining item-by-item to describe specific skills required to provide correct responses. After the items had been linked to specific skills, they were placed in groups of test items with similar difficulty values and shared a common "theme", hence the eight levels of competence for the reading and mathematics tests as presented in Figure 7.1. The first three competency levels in reading and mathematics employ the same prefixes ("Pre-", "Emergent" and "Basic") in order to reflect the mechanical nature of the most elementary competencies. From the fourth level upwards the prefixes of the summary names were different, designed to reflect deeper levels of understanding of subject-specific competencies (SACMEQ III report, 2007).

Figure 7.1: The SACMEQ competency levels in reading and mathematics

	Reading Competency Levels					Mathematics Competency Levels		
	Level	Descriptor	Competency			Level	Descriptor	Competency
Basic Reading Skills	1	Pre- reading	Matches words and pictures involving concrete concepts and everyday objects.		Basic Mathematics Skills	1	Pre-numeracy	Applies single step addition and subtraction.
	2	Emergent Reading	Matches words and pictures involving prepositions and abstract concepts			2	Emergent Numeracy	Applies a two-step addition and subtraction involving carrying.
	3	Basic Reading	Interprets meaning (by matching words and phrases, completing sentences).			3	Basic Numeracy	Translates verbal information into arithmetic operations.
	4	Reading for Meaning	Reads to link and interpret information located in various parts of the text.			4	Beginning Numeracy	Translates verbal or graphic information into simple arithmetic problems
	5	Interpretive Reading	Interprets information from various parts of the text in association with external information.		Advanced Mathematics Skills	5	Competent Numeracy	Translates verbal, graphic, or tabular information into an arithmetic form in order to solve a given problem.
Advanced Reading Skills	6	Inferential Reading	Reads to combine information from various parts of the text so as to infer the writer's purpose.			6	Mathematically Skilled	Solves multiple-operation problems (using the correct order) involving fractions, ratios, and decimals.
	7	Analytical Reading	Locates information in longer texts (narrative, document or expository) in order to combine information from various parts of the text so as to infer the writer's personal beliefs (value systems, prejudices and biases).			7	Concrete Problem Solving	Extracts and converts information from tables, charts and other symbolic presentations in order to identify, and then solve multi-step problems
	8	Critical Reading	Reads from various parts of the text so as to infer and evaluate what the writer has assumed about both the topic and the characteristics of the reader			8	Advanced Problem Solving	Identifies the nature of an unstated mathematical problem embedded within verbal or graphic information and then translate this into symbolic, algebraic or equation form in order to solve a problem

The eight competency levels provide a more concrete analysis of what pupils and teachers can do as well as a frame of reference for instructional strategies relevant to pupils who are learning at each level. Such descriptions are of great assistance for the construction of textbooks, the design of teacher in-service programmes, and the development of general classroom teaching strategies – because all these activities require a sound knowledge of the skills already acquired and the higher order skills that should be aimed at to transfer to the next stage of learning in secondary (SACMEQ III report, 2007).

7.1.3 Categories of reading and mathematics skills

Similar to previous reports (SACMEQ II, III and IV), two broad categories of reading skills were created for SEACMEQ V. The first, labelled "Basic Reading" consisted of the first five levels, involving what can best be described as mechanical reading skills that included:

- recognising and decoding words,
- matching individual words and phrases and extracting information directly from the text and
- reading forward and interpreting adjacent pieces of information.

The second, "Advanced Reading", consisted of the last three levels and involved mainly inferential reading for meaning from within and outside the text. This reading category can be described as follows:

- interpreting and making inferences from different types of text,
- analysing detailed texts or extended documents for underlying messages and
- reading forward and backward making judgments about the assumptions, values and biases of the author.

For mathematics, a similar approach was used for categorising skills in mathematics. "Basic Mathematics" consisted of the first four levels and "Advanced Mathematics" which included the last four levels. This is a slight deviation from the categorization from reading and it is done for comparative purposes with SACMEQ III. "Basic Mathematics" competencies involve mainly manipulation of basic operations and recognition of shapes and figures, including:

- applying single and two step addition or subtraction of whole numbers and basic fractions,
- recognising three dimensional shapes and number units and
- translating simple textual/verbal information into basic arithmetic forms using whole numbers and fraction.

"Advanced Mathematics" was specifically targeting more complex problem-solving skills and, including:

- solving multiple operation problems using the correct order of arithmetic operations on whole and mixed numbers, fractions, ratios and decimals,
- extracting and converting information from tables, charts, visual and symbolic presentations to identify, and then solve multi – step problems, and
- identifying the nature of an unstated mathematical problem embedded within verbal or graphic information, and then translating this into symbolic, algebraic, or equation form to solve the problem.

7.2 Pupil overall performance in reading and mathematics tests by subgroups

Table 7.1 presents the mean scores for reading and mathematics performance across four SACMEQ/SEACMEQ periods (SACMEQ II – SEACMEQ V) for P6 pupils in Seychelles' six regions. SEACMEQ V involved a census of all P6 pupils, eliminating sampling error considerations.

The chapter also presents raw results (not statistically tested for influence) regarding gender, school location and socioeconomic status (SES) based on P6 pupils' home conditions and parental education (Dolata, 2005) in Table 7.2.

Performance trends reflect the impact of educational reforms since 2008, including the 2013 National Curriculum Framework and National Assessment Framework that introduced standardized testing modelled after SACMEQ procedures. Despite these initiatives and the 2015 Seychelles Early Learning Framework, 2021 aw performance declines potentially linked to economic challenges and the COVID-19 pandemic disruptions to face-to-face instruction.

Table 7.1: P6 Pupils Mean performance on reading and mathematics tests for SACMEQ II, III, IV and V by region

Regions	2000		2007		2013		2021	
	Reading	Mathematics	Reading	Mathematics	Reading	Mathematics	Reading	Mathematics
Central	596.9	567.1	581.0	557.3	626.3	604.5	571	585
East	560.4	551.5	574.9	548.0	581.1	586.8	526	561
Island	576.7	552.4	565.2	543.7	593.5	606.0	556	568
North	567.4	534.6	585.2	554.1	615.1	605.8	564	583
South	585.3	554.2	584.9	551.5	623.5	603.3	560	572
West	585.0	550.0	550.3	539.1	593.1	580.7	551	561
Seychelles	**582.0**	**554.3**	**575.1**	**550.7**	**608.9**	**599.1**	**557**	**574**

Table 7.2: P6 Pupils Mean scores for the reading and mathematics tests by subgroup for SACMEQ II, III, IV and SEACMEQ V

Subgroups		2000		2007	
		Reading	Mathematics	Reading	Mathematics
		Mean	Mean	Mean	Mean
Pupil Gender	Boys	549.7	535.5	544.4	535.2
	Girls	614.2	573.1	607.2	566.7
School Location	Rural	576.1	549.2	571.6	550.2
	Urban	583.1	555.3	576.7	550.9
SES Level	Low	545.7	519.9	509.3	498.7
	High	637.8	604.3	628.5	593.6
SEYCHELLES		**582.0**	**554.3**	**575.1**	**550.7**

Subgroups		2013		2021	
		Reading	Mathematics	Reading	Mathematics
		Mean	Mean	Mean	Mean
Pupil Gender	Boys	580.1	582.0	539	569
	Girls	639.4	616.7	577	581
School Location	Rural	601.1	598.0	545	569
	Urban	621.4	600.7	568	579
SES Level	Low	589.9	582.9	532	553
	High	622.7	609.6	579	592
SEYCHELLES		**608.9**	**599.1**	**557**	**574**

7.2.1 Mean performance on reading and mathematics tests for pupils by region

P6 pupils nationally scored above the SEACMEQ Benchmark (500) in both reading and mathematics, though 2021 recorded the lowest mean scores compared to previous cycles. After steady improvements from SACMEQ II to IV (notably in mathematics possibly due to the IPAM project launched in 2008, with P6 pupils in the Islands region gaining 62 points by 2013), 2021 saw P6 pupils' scores decline by 52 points in reading and 25 in mathematics, potentially COVID-19 related.

Regionally, P6 pupils from all regions showed declines in reading scores, most sharply in the South (63.5 points), Central and East (55 points each) regions. In mathematics, performance amongst P6

pupils in the Island region declined most (38 points). Despite these declines, P6 pupils in the Central region maintained strong performance in mathematics (585), though its reading score (571) dropped slightly, while those in the East region continued to perform below the national averages in both subjects (526 in reading and 561 in mathematics), consistent with trends since 2000.

7.2.2 Mean scores for the reading and mathematics tests for pupils by gender

Female P6 pupils consistently outperformed male P6 pupils in reading and mathematics across all SACMEQ/SEACMEQ cycles, though 2021 marked the first time girls reading scores fell below 600. Both genders performance declined in 2021 with the gap in mathematics narrowing significantly, from 34.7 points in 2013 to 12 points, primarily due to a sharper decline in P6 girls' performance. The gap in reading decreased from 59.3 points to 38 points. Since 2000's gender gaps (64.5 points in reading and 37.6 points in mathematics), both genders mean scores peaked in SACMEQ IV, suggesting current needs mathematics support across genders and targeted literacy interventions for boys.

7.2.3 Mean scores for the reading and mathematics tests for pupils by school location

P6 pupils from schools in urban areas consistently outperformed those from schools in rural areas in both reading and mathematics across all SACMEQ/SEACMEQ periods. By 2021, pupils from schools in urban areas led by 23 points in reading (up from 7 in 2000) and 10 in mathematics (up from 6 in 2000). In 2000, the gaps were smaller (7 points in reading and 6 points in mathematics). After narrowing in 2007 (5.1 points in reading and 0.7 points in mathematics), disparities emerged by 2013 and widened further, indicating the need for targeted interventions to support schools in rural areas, particularly in reading.

7.2.4 Mean scores for the reading and mathematics tests for pupils by SES

SES disparities persisted in 2021, with high-SES P6 pupils low-SES peers by 47 points in reading and 39 points in mathematics. While smaller than the peak in 2007 (nearly 120 points in reading and 95 points in mathematics), these gaps represent lost progress from 2013 (32.8 points in reading and 26.7 points in mathematics) when low-SES P6 pupils showed significant gains. The 2021 widening, though modest compared to 2000 and 20007, suggests unsustained improvements, necessitating targeted literacy interventions for low-SES P6 pupils.

7.3 Pupils' reading and mathematics by competence levels

SEACMEQ studies outline eight competency levels for both reading and mathematics, with Level 1 being the lowest and Level 8 the highest. These levels provide insight into the skills mastered by pupils and can support policy and planning. The percentage distribution of P6 pupils for reading and mathematics are detailed by region (Tables 7.3 and 7.4), school ownership (Table 7.5) and demographics such as gender, location, and SES (Table 7.6).

Table 7.3: Percentage of P6 pupils reaching various reading competence levels by region (SACMEQ II, III, IV and SEACMEQ V)

Region	2000								2007							
	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5	Lvl 6	Lvl 7	Lvl 8	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5	Lvl 6	Lvl 7	Lvl 8
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Central	2.9	7.9	6.4	11.7	13.8	13.0	20.6	23.6	4.3	7.7	11.2	8.9	11.5	15.5	22.1	23.6
East	3.9	7.4	9.9	15.8	16.2	14.8	21.7	10.3	2.9	10.1	7.6	12.9	13.9	17.3	14.4	10.3
Island	1.8	5.5	8.6	14.4	17.5	19.9	22.3	9.9	5.6	2.5	10.7	15.7	11.7	22.3	22.3	9.9
North	2.4	8.5	12.4	15.4	13.4	13.4	19.5	15.0	2.8	7.5	9.9	6.6	12.6	20.8	21.5	15.0
South	3.9	6.0	11.5	9.9	16.4	13.1	21.8	17.4	5.1	6.2	9.6	7.4	7.9	20.3	28.2	17.4
West	2.9	6.8	10.2	10.3	12.7	21.3	28.2	10.9	6.2	9.2	10.8	12.3	16.0	15.9	21.0	10.9
Seychelles	3.0	7.4	6.3	12.8	14.6	15.0	21.8	16.7	4.4	7.4	10.2	10.3	12.1	18.0	21.5	16.7

Region	2013								2021							
	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5	Lvl 6	Lvl 7	Lvl 8	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5	Lvl 6	Lvl 7	Lvl 8
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Central	0.6	2.3	5.4	11.1	9.9	16.7	28.2	25.8	2.2	4.8	11.3	18.3	10.9	15.7	25.8	11.1
East	1.3	5.8	8.7	13.3	14.0	19.8	22.8	14.2	1.7	12.0	18.9	18.5	12.0	13.7	18.9	4.3
Island	2.2	3.7	6.7	11.1	11.9	17.2	37.2	10.1	1.8	3.5	14.6	16.4	16.4	17.0	22.8	7.6
North	0.0	3.5	4.1	4.6	14.3	27.1	29.6	16.7	1.2	4.2	20.4	14.4	10.8	14.4	24.6	10.2
South	1.5	2.4	3.2	7.4	13.9	16.3	28.9	26.4	1.5	5.9	16.3	11.1	12.6	19.3	25.2	8.1
West	0.0	3.8	10.2	8.3	14.3	20.9	27.6	14.9	1.4	5.7	14.3	18.6	17.1	18.6	13.6	10.7
Seychelles	0.9	3.4	6.3	9.7	12.4	19.3	28.9	19.3	1.8	6.0	15.0	16.9	12.6	16.0	22.7	9.0

Table 7.4: Percentage of P6 pupils reaching various mathematics competence levels by region (SACMEQ II, III, IV and SEACMEQ V)

Region	2000								2007							
	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5	Lvl 6	Lvl 7	Lvl 8	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5	Lvl 6	Lvl 7	Lvl 8
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Central	1.7	16.2	22.3	20.3	17.1	15.6	5.3	1.6	1.6	16.3	23.6	24.7	13.5	14.3	4.4	1.7
East	2.9	24.7	19.7	20.6	11.9	9.9	8.9	1.5	2.4	16.3	24.0	27.9	11.5	13.5	2.4	2.0
Island	2.5	23.8	23.7	14.9	13.0	17.3	3.7	1.2	1.0	14.2	30.9	25.9	12.2	15.2	0.5	0.0
North	4.4	22.0	28.3	17.7	14.6	9.3	2.8	0.8	2.4	14.1	22.6	26.3	18.8	14.1	0.9	0.9
South	3.9	17.5	27.3	17.6	12.0	14.7	5.4	1.6	2.8	16.4	18.0	28.8	16.9	15.3	1.1	0.6
West	0.6	21.8	26.4	26.0	7.5	11.5	4.0	2.3	1.5	18.0	28.7	27.7	14.9	5.6	1.5	2.1
Seychelles	**2.6**	**20.0**	**24.2**	**19.7**	**13.8**	**13.3**	**5.0**	**1.5**	**1.9**	**15.9**	**24.5**	**26.4**	**14.4**	**13.2**	**1.5**	**1.3**

Region	2013								2021							
	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5	Lvl 6	Lvl 7	Lvl 8	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5	Lvl 6	Lvl 7	Lvl 8
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Central	0.7	7.2	17.9	17.6	25.5	18.7	8.0	4.4	0.4	5.1	27.0	26.8	15.9	15.4	5.9	3.5
East	0.0	7.1	26.5	20.5	21.0	14.4	8.3	2.1	0.4	4.7	35.6	26.6	18.0	9.9	4.3	0.4
Island	0.0	8.6	21.0	14.3	24.2	17.4	8.3	6.2	0.0	6.6	28.7	26.3	21.6	14.4	1.8	0.6
North	0.0	5.9	15.8	23.6	25.9	17.3	7.7	3.8	0.0	6.0	24.1	29.5	15.7	18.1	3.6	3.0
South	1.7	4.5	15.9	24.0	20.2	21.4	10.5	1.8	0.0	6.0	30.8	24.1	20.3	11.3	5.3	2.3
West	0.0	7.5	28.0	23.3	19.1	12.5	7.6	1.9	0.0	7.2	35.3	28.8	11.5	11.5	4.3	1.4
Seychelles	**0.4**	**6.9**	**20.4**	**19.9**	**23.3**	**17.2**	**8.3**	**3.6**	**0.2**	**5.6**	**29.6**	**27.0**	**16.9**	**13.8**	**4.6**	**2.2**

Table 7.5: Percentage of P6 pupils reaching the various reading & mathematics competence levels at National level in 2021 by School Ownership

	Reading									
	Standardized Scores	Acceptable Skills	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
	%	%	%	%	%	%	%	%	%	%
Public	549	75.5	1.9	6.5	15.9	18.0	13.2	16.0	21.1	7.5
Private	688	100.0	0.0	0.0	0.0	1.4	4.1	14.9	43.2	36.5
Seychelles	**557**	**77.2**	**1.8**	**6.0**	**15.0**	**16.9**	**12.6**	**16.0**	**22.7**	**9.0**

	Mathematics									
	Standardized Scores	Acceptable Skills	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
	%	%	%	%	%	%	%	%	%	%
Public	566	-	0.2	6.0	31.5	28.3	16.4	12.6	3.6	1.4
Private	698	-	0.0	1.4	0.0	9.5	24.3	27.0	21.6	16.2
Seychelles	**574**	**-**	**0.2**	**5.6**	**29.6**	**27.0**	**16.9**	**13.8**	**4.6**	**2.2**

Table 7.6: Percentage of P6 pupils at "Advanced Skills in reading and mathematics by gender, school location and Socio-Economic Status

Subgroups		2000		2007	
		Reading	Mathematics	Reading	Mathematics
		%	%	%	%
Pupil Gender	Boys	43	26	45	25
	Girls	64	42	67	37
School Location	Rural	55	27	56	30
	Urban	53	35	56	32
SES	Low	42	19	40	17
	High	79	54	71	47
Seychelles		54	34	56	31

Subgroups		2013		2021	
		Reading	Mathematics	Reading	Mathematics
		%	%	%	%
Pupil Gender	Boys	54	45	41	35
	Girls	81	60	55	40
School Location	Rural	66	51	44	36
	Urban	70	55	51	39
SES	Low	62	47	38	29
	High	72	56	56	44
Seychelles		**68**	**52**	**48**	**38**

7.3.1 Percentage of P6 pupils reaching various reading competence levels by region

In 2021, 47.7 percent of P6 pupils nationally reached Advanced Levels (Levels 6 to 8), a decline from 67.5 percent in 2013. Correspondingly, 52.3 percent of P6 pupils attained Basic Levels (Levels 1 to 5) in 2021, up from 32.7 percent in 2013. The Island region mirrored national trends, with 52.7 percent of P6 pupils at Basic Levels and 47.4 percent at Advanced Levels.

Regional disparities were evident, with only 36.9 percent of P6 pupils in the East reaching the Advanced Levels, the lowest among all regions, while 63.1 percent remained at Basic Levels. The West region showed similar patterns, with 57.1 percent of P6 pupils at Basic Levels and 42.9 percent at Advanced Levels. The North and Island regions performed slightly better than the national average, with 49.2 percent and 47.4 percent of their P6 pupils respectively achieving Advanced Levels, though showing declines from previous years. The Central region maintained relatively strong performance, with 52.6 percent of P6 pupils reaching Advanced Levels.

7.3.2 Percentage of P6 pupils reaching various mathematics competence levels by region

In 2021, 62.4 percent of P6 pupils nationally demonstrated Basic Mathematics Skills (Levels 1 to 4), increasing from 47.6 percent in 2013. Regional variations were significant, ranging from 71.3 percent of P6 pupils in the West at Basic Levels to 59.3 percent in the Central region. Most P6 pupils at Basic Levels clustered in Levels 3 and 4, with the West region having the highest concentration (64.1% of P6 pupils. The East region showed significant numbers at these levels (35.6% at Level 3 and 26.6% at Level 4).

For Advanced Mathematics Skills (Levels 5 to 8), 21.6 percent of P6 pupils in the Island region reached Level 5, the highest proportion nationally, followed by 20.3 percent of P6 pupils in the South. The lowest proportion observed nationally was in the West region (11.5% of P6 pupils), closely preceded by the Central region (15.9% of P6 pupils). The percentage of P6 pupils reaching Levels 7 and 8 remained low overall; the Central region performed best (5.9% of P6 pupils reaching Level 7 and 3.5% reaching Level 8), while the South region recorded 5.3 percent and 2.3 percent of P6 pupils respectively. The West region saw 4.3 percent of P6 pupils in Level 7 and 1.4 percent in Level 8.

The 2021 results reveal persistent regional disparities, with the percentage of P6 pupils in the Central region generally higher than other regions, particularly in Advanced Competencies, while the West and East regions lagged.

7.3.3 Percentage of P6 pupils at "Advanced Skills" in reading and mathematics by School Ownership

The data reveals disparities in achievement between P6 pupils attending public and private schools. Nationally, 77.2 percent of P6 pupils achieved acceptable skills in reading, with a national standardized score of 557. Among P6 pupils in public schools, 75.5 percent reached acceptable skills levels (scoring 549), while only 7.5 percent of these P6 pupils attained Level 8 Advanced Reading Skills and 21.1 percent reached Level 7.

In contrast, 100.0 percent of pupils in private schools achieved acceptable reading skills, with a markedly higher standardized score of 688. Notably, 36.5 percent of private school P6 pupils

reached Level 8 and 43.2 percent achieved Level 7, demonstrating superior achievements than their public-school peers.

For mathematics, while the national standardized score stood at 574, P6 pupils in public school showed concentration in middle competency levels with limited advanced achievement. Private school P6 pupils again performed better, with greater representation in higher levels of competence. These findings reveal a pronounced achievement gap based on school ownership that warrants targeted interventions to improve public school P6 pupils' outcomes.

7.3.4 Percentage of P6 pupils at "Advanced Skills" in reading and mathematics by gender

Gender-based analysis shows consistent achievement gaps among P6 pupils. In reading, while 55 percent of female P6 pupils achieved Advanced Skills in 2021 (down from 81% in 2013), only 41 percent of male P6 pupils reached this level (declining from 54% in 2013). Both figures represent concerning drops from peak performance years.

Mathematics outcomes follow similar patterns, with 40 percent of female P6 pupils reaching Advanced Levels compared to 35 percent of male P6 pupils in 2021. While female P6 pupils maintained an advantage, both genders showed significant declines from 2013 peaks (60% for girls and 45% for boys). These trends highlight the need for gender-sensitive interventions to support all P6 pupils, with particular attention to boys' performance gaps.

7.3.5 Percentage of P6 pupils at "Advanced Skills" in reading and mathematics by School Location

Location-based disparities among P6 pupils persisted though narrowed slightly by 2021. In reading, 51 percent of P6 pupils from schools in urban areas achieved advanced skills compared to 44 percent of P6 pupils from schools in rural areas, both representing declines from 2013 (70% of P6 pupils from urban areas and 66% in rural areas).

Mathematics outcomes showed a smaller advantage by schools from urban areas (39% of P6 pupils) compared to 36 percent of P6 pupils from schools in rural areas, though all P6 pupils achieved below 2013 peaks. While the urban-rural gap has narrowed, the overall decline in

advanced skills among P6 pupils across locations signals systemic challenges requiring comprehensive solutions.

7.3.6 Percentage of P6 pupils at "Advanced Skills" in reading and mathematics by SES

Socioeconomic status (SES) remains a strong determinant of P6 pupils' achievement. In reading, 56 percent of high-SES P6 pupils reached Advanced Levels compared to just 38 percent of their low-SES P6 peers, a gap that widened from 10 percentage points in 2013 to 18 points in 2021.

Mathematics outcomes show parallel trends, with 44 percent of high-SES P6 pupils achieving Advanced Skills versus 29 percent of low-SES P6 pupils. These widening disparities, coupled with the overall decrease from 2013 peaks, underscore the need for equity-focused interventions to support vulnerable P6 populations and reverse downward achievement trends.

Policy Suggestion 7.1: The Ministry of Education should place a strong emphasis on strengthening targeted support and closing gaps in pupil achievement

7.1.1 Establish a steering committee to focus on improving pupil attainment across schools, introducing creative and evidence-based approaches that address both gender disparities and regional achievement gaps.

Policy Suggestion 7.2: The Ministry of Education should engage in curriculum review and instructional practice enhancement

7.2.1 Commission a taskforce to evaluate the primary mathematics and reading curriculum, along with instructional practices, to develop proposals that will enhance pupils' competency levels across both subjects.

7.2.2 Integrate SEACMEQ competency levels into the Assessment Framework at Key Stages 2 and 3, allowing better assessment of pupils' mastery and informed targeted support strategies.

7.4 Teachers' reading and mathematics test scores by subgroups

The SACMEQ Study results for teacher reading and mathematics test scores provide critical insights into the skills of Seychelles teachers who teach P6 pupils. These scores are useful for informing policy and improving teaching quality. Table 7.7 shows the average reading and mathematics scores of teachers of P6 pupils across four SACMEQ/SEACMEQ periods (2000, 2007, 2013 and 2021), while Tables 7.8 and 7.9 present the proportions of P6 pupils taught by teachers with various reading and mathematics competency levels by region. Table 7.10 focuses on SEACMEQ V and displays the performance of teachers of P6 pupils by school ownership in reading and mathematics.

Table 7.7: Mean performance of P6 pupils' teachers on reading and mathematics tests (SACMEQ II, III, IV & SEACMEQ IV)

Regions	2000		2007		2013		2021	
	Reading	Mathematics	Reading	Mathematics	Reading	Mathematics	Reading	Mathematics
Central	795.9	881.1	851.9	827.1	828.4	781.1	902	789
East	800.6	840.0	842.7	817.1	796.9	821.9	856	712
Island	789.5	901.5	796.1	789.2	797.3	835.6	853	755
North	802.6	848.2	844.1	816.7	735.5	775.1	877	784
South	837.2	909.7	816.7	864.8	796.1	814.5	899	826
West	842.7	857.2	792.3	823.4	741.1	883.0	932	859
Seychelles	**807.5**	**872.6**	**830.8**	**823.1**	**790.9**	**812.0**	**886**	**783**

Table 7.8: Percentage of P6 pupils taught by teachers reaching the various reading competence levels by Region (SACMEQ II, III, IV & SEACMEQ IV)

Region	2000			2007			2013			2021		
	Level 6	Level 7	Level 8	Level 6	Level 7	Level 8	Level 6	Level 7	Level 8	Level 6	Level 7	Level 8
	%	%	%	%	%	%	%	%	%	%	%	%
Central	0.0	16.0	84.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0
East	0.0	0.0	100	0.0	0.0	100.0	0.0	15.1	84.9	0.0	9.5	90.5
Island	0.0	0.0	100	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0
North	0.0	0.0	100	0.0	0.0	100.0	0.0	18.7	81.3	0.0	0.0	100.0
South	0.0	0.0	100	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0
West	0.0	0.0	100	0.0	18.0	82.0	0.0	21.7	78.3	0.0	0.0	100.0
Seychelles	**0.0**	**5.8**	**94.2**	**0.0**	**2.4**	**97.8**	**0.0**	**7.7**	**92.3**	**0.0**	**1.7**	**98.3**

Table 7.9: Percentage of P6 pupils taught by teachers reaching the various mathematics competence levels by Region (SACMEQ II, III, IV & SEACMEQ V)

Region	2000			2007			2013			2021		
	Level 6	Level 7	Level 8	Level 6	Level 7	Level 8	Level 6	Level 7	Level 8	Level 6	Level 7	Level 8
	%	%	%	%	%	%	%	%	%	%	%	%
Central	0.0	16.9	84.0	4.6	39.1	56.3	12.8	23.2	44.6	21.2	46.6	32.2
East	0.0	42.3	57.7	12.3	45.9	41.8	0.0	50.5	49.5	0.0	0.0	46.7
Island	0.0	28.6	71.4	11.1	42.1	46.8	0.0	17.8	82.2	40.9	43.6	15.4
North	0.0	33.5	66.5	0.0	61.0	39.0	14.8	24.3	48.6	25.5	32.4	42.1
South	0.0	19.0	81.0	0.0	8.4	91.6	0.0	31.6	68.4	9.6	32.0	58.4
West	0.0	14.0	86.0	0.0	34.6	65.4	0.0	22.9	77.1	19.8	0.0	80.2
Seychelles	**0.0**	**24.1**	**75.9**	**4.8**	**39.4**	**55.8**	**6.1**	**27.5**	**58.3**	**20.1**	**32.6**	**40.0**

Table 7.10: Percentage of P6 pupils taught by teachers reaching the various reading & mathematics competence levels at National level in 2021 by School Ownership

	Reading									
	Standardized Scores	Acceptable Skills	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
	%	%	%	%	%	%	%	%	%	%
Public	**880**	**100.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**1.9**	**98.1**
Private	**957**	**100.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**100.0**
Seychelles	**886**	**100.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**1.7**	**98.3**

	Mathematics									
	Standardized Scores	Acceptable Skills	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
	%	%	%	%	%	%	%	%	%	%
Public	**784**	**-**	**0.0**	**0.0**	**0.0**	**2.8**	**5.1**	**21.5**	**27.8**	**42.8**
Private	**759**	**-**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**100.0**	**0.0**
Seychelles	**783**	**-**	**0.0**	**0.0**	**0.0**	**2.6**	**4.7**	**20.1**	**32.6**	**40.0**

7.4.1 Mean performance of P6 pupils' teachers on reading and mathematics tests by region

In 2021, P6 pupils in Seychelles were taught by teachers who achieved their highest reading mean score across all SACMEQ/SEACMEQ periods, with a national average of 886. This marks a 95-point increase from 2013, reflecting significant progress in literacy initiatives for P6 pupils. P6 pupils in the West region were taught by teachers with the highest reading score (932), far

exceeding the national mean. P6 pupils in the North and South regions were taught by teachers who also showed marked improvements, with gains of 141.5 and 102.9 points, respectively. While all regions saw improvements, P6 pupils in the North, East and Island regions were taught by teachers, scoring below the national mean (877, 856 and 853 respectively). These regional disparities highlight the need for targeted literacy support to ensure equitable learning outcomes for P6 pupils.

Conversely, the 2021 mathematics results showed a decline, with P6 pupils nationally being taught by teachers averaging a mean score of 783, the lowest across all SACMEQ/SEACMEQ periods, falling below 800 for the first time and marking a 29-point drop from 2013. P6 pupils in the East region were taught by teachers with the lowest mathematics score (712), a 110-point decline. P6 pupils in the Island region were also taught by teachers who saw a significant drop of 80.6 points. Minor gains of 11.5, 8.9 and 7.9 points were noted for P6 pupils in the South, North and Central regions respectively, but these were insufficient to offset the overall decline. These results emphasize the need for improved mathematics pedagogy and professional development to address regional disparities and enhance the competency of teachers of P6 pupils in mathematics.

7.4.2 Percentage of P6 pupils taught by teachers reaching various reading competence levels by region

In 2021, 98.3 percent of P6 pupils were taught by teachers achieving Level 8 in reading. This marks an improvement over previous years, where 92.3 percent of P6 pupils were taught by teachers at Level 8 in 2013 and 97.8 percent in 2007. Most regions, except the East, had 100.0 percent of P6 pupils taught by teachers at Level 8. The East region improved to 90.5 percent of P6 pupils being taught by teachers at Level 8 (up from 84.9% in 2013) but still lagged. This regional gap may affect pupil outcomes and underscores the need for consistent support.

The North (81.3% in 2013) and West (78.3% in 2013) regions recovered significantly. with 100.0 percent of P6 pupils being taught by teachers at Level 8 in 2021. Other regions, such as the Central, Island and South, consistently performed well across SACMEQ/SEACMEQ periods, maintaining high competence levels. These improvements suggest that efforts to boost teachers 'reading competence for P6 pupils have been effective.

7.4.3 Percentage of P6 pupils taught by teachers reaching various mathematics competence levels by region

The 2021 mathematics results revealed a decline in teacher competence, with only 40.0 percent of P6 pupils being taught by teachers reaching Level 8, down from 58.3 percent in 2013. This represents the lowest Level 8 achievement across all SACMEQ/SEACMEQ periods. The West region performed the best, with 80.2 percent of P6 pupils being taught by teachers at Level 8, a slight improvement from 77.1 percent in 2013. In contrast, the Island region experienced a steep drop, with only 15.4 percent of P6 pupils being taught by teachers at Level 8 compared to 82.2 percent in 2013. Other regions saw declines as well, with the South dropping from 68.4 percent to 58.4 percent, and the East decreasing from 49.5 percent to 46.7 percent. The North remained relatively stable, decreasing slightly from 48.6 percent to 42.1 percent. Compared to 2000 and 2007, when national performance was stronger, the 2021 results highlight a need for enhanced mathematics teacher training and support to address these regional disparities and improve outcomes for P6 pupils.

7.4.4 Percentage of P6 pupils taught by teachers reaching the various reading & mathematics competence levels at National level in 2021 by school ownership

In 2021, the distribution of P6 pupils by their teachers' reading competence was strong across both public and private schools, with private school teachers outperforming their public-school counterparts. The national reading mean was 886, with 100.0 percent of P6 pupils in private school being taught by teachers at Level 8 and a standardized score of 957. In public schools, 98.1 percent of P6 pupils were taught by teachers at Level 8, with a mean of 880, indicating a high level of reading competence but suggesting room for improvement.

Mathematics performance showed greater variability. The national mathematics mean was 783. In public schools, 42.8 percent of P6 pupils were taught by teachers at Level 8, while 27.8 percent were taught by at Level 7 and 21.5 percent at Level 6, indicating that many did not achieve the highest proficiency. In contrast, private school teachers, despite a lower mean score of 759 and 0.0 percent of P6 pupils being taught by teachers at Level 8, had 100 percent taught by teachers at Level 7, demonstrating uniformity in their level of competence.

These results underscore the need for targeted professional development in mathematics for teachers of P6 pupils in public schools to bridge the gap and for private school teachers to raise their competency level, ensuring consistent teaching quality across Seychelles.

Policy Suggestion 7.3: Conduct an audit to identify primary school teachers without formal mathematics qualifications and continue the in-service IGCSE Core Mathematics programme to improve teachers' foundational knowledge and ensure consistent quality across all regions.

Policy Suggestion 7.4: Design a comprehensive continuing professional development programme focused on upskilling teachers in reading and mathematics.

Policy Suggestion 7.5: The Ministry of Education should establish a partnership between public and private schools to facilitate the exchange of best practices, teaching methodologies and resources to strengthen teaching strategies in mathematics and reading, ultimately boosting pupils' outcomes.

Policy Suggestion 7.6: Undertake a review of the mathematics curriculum for primary schools, to ensure that the curriculum aligns with advanced skills necessary for pupils to attain higher competence levels.

Policy Suggestion 7.7: Conduct regular assessments and comparative analyses of school performance across regions, using the data to make informed decisions and prioritize support for schools where pupils' outcomes are below national targets.

7.5 Introduction - Knowledge about HIV-AIDS and Other Health Topics

The first case of HIV-AIDs was reported in USA in 1981, and since then, the pandemic has significantly affected health care, social and economic development worldwide, including Seychelles.

In 2006, SACMEQ Assembly of Ministers highlighted the need for a robust indicator to evaluate the effectiveness of HIV and AIDS prevention programmes. The short list of five test questions previously used "United Nations General Assembly (UNGASS) HIV-AIDS Knowledge Indicator for Young People" was deemed inadequate due to its limited scope and problematic question design. To address this, the SACMEQ III Project developed the HIV-AIDS Knowledge Test (HAKT) for Primary Six pupils and teachers, comprising 86 items on 43 curriculum topics. In SEACMEQ V, the test was expanded to 87 items, covering 37 items on HIV & AIDS and 50 items on other Health Knowledge issues.

The HAKT evaluates foundational health knowledge using two scoring procedures: Rasch-scaled "HAKT scores" (normalized to a mean of 500 and a standard deviation of 100) and Dichotomous "HAKT Minimum Knowledge Scores" (indicating whether pupils or teachers reached (score = 1) or did not reach (score = 0) SACMEQ's "minimal" HIV and AIDS knowledge benchmark (defined as mastery of half of the official curriculum assessed by the "HAKT Desirable Knowledge Scores").

The results for the HAKT are presented as three sets of figures displaying Average HAKT Scores, Average HAKT Minimum Level Scores (as a percentage) and Average HAKT Desirable Level Scores (also as a percentage). Comparative analysis is conducted across 2007, 2013 and 2021 for the minimum and desirable levels, while standardized scores are reported only for 2021.

7.6 Pupils' Knowledge about HIV-AIDS

Results for the HAKT for Primary Six pupils are presented in Tables 7.11 to 7.15.

Table 7.11: Mean performance ("T-Score") on the HAKT and percentages of P6 pupils reaching the minimum and desirable levels of knowledge about HIV-AIDS by Region

Region	2007			2013			2021		
	T-Score	Minimum Level (%)	Desirable Level (%)	T-Score	Minimum Level (%)	Desirable Level (%)	Std-Score Mean	Minimum Level (%)	Desirable Level (%)
Central	477.9	19.9	2.3	477.2	20.5	0.8	424	7.5	0.0
East	489.2	28.4	4.3	500.0	35.6	2.3	413	6.9	1.3
Island	505.7	33.0	3.1	497.1	34.9	0.7	440	17.0	3.5
North	501.4	27.7	3.7	504.6	36.5	3.9	446	18.6	7.2
South	501.9	34.4	3.4	524.9	46.5	7.8	433	11.1	0.7
West	463.2	18.0	1.0	468.9	17.6	0.0	447	14.4	2.9
Seychelles	**487.5**	**25.4**	**2.8**	**490.1**	**28.6**	**2.0**	**430**	**11.0**	**1.9**

Table 7.12: Mean performance (T-Score) on the HAKT and percentages of P6 pupils reaching the minimum and desirable levels of knowledge about HIV and AIDS by Region and Gender

2007	Boys			Girls		
Region	T-Score	Minimum Level (%)	Desirable Level (%)	T-Score	Minimum Level (%)	Desirable Level (%)
Central	469.9	18.0	1.7	486.0	21.8	2.9
East	477.7	22.9	2.9	500.7	33.9	5.8
Island	490.9	30.7	3.0	521.3	35.4	3.1
North	493.2	23.4	0.8	510.9	32.6	7.1
South	493.6	26.8	3.5	509.7	41.9	3.3
West	455.0	14.5	1.0	472.6	22.0	1.1
Seychelles	**478.0**	**21.7**	**2.0**	**497.4**	**29.3**	**3.7**

2013	Boys			Girls		
Region	T-Score	Minimum Level (%)	Desirable Level (%)	T-Score	Minimum Level (%)	Desirable Level (%)
Central	471.6	20.0	1.0	488.1	25.3	0.8
East	481.4	26.6	2.3	515.5	42.2	2.1
Island	475.2	25.6	0.0	507.8	38.4	1.0
North	496.2	32.8	3.0	501.9	33.2	3.5
South	496.6	32.7	4.8	556.1	61.1	11.4
West	445.4	9.7	0.0	483.5	20.0	0.0
Seychelles	**476.0**	**23.5**	**1.6**	**504.0**	**34.2**	**2.5**

2021	Pupils Achieving		
Gender	Std-Score Mean	Minimum Level (%)	Desirable Level (%)
Boys	418	7.4	0.9
Girls	444	14.9	3.1
Seychelles	**430**	**11.0**	**1.9**

Table 7.13: Mean performance (T-Score) on the HAKT and percentages of P6 pupils reaching the minimum and desirable levels of knowledge about HIV and AIDS by School Location

2007	Rural			Urban		
Region	T-Score	Minimum Level (%)	Desirable Level (%)	T-Score	Minimum Level (%)	Desirable Level (%)
Central	0.0	0.0	0.0	477.9	19.9	2.3
East	502.5	35.7	4.5	473.2	19.6	4.1
Island	505.2	32.2	1.7	505.9	33.3	3.6
North	513.1	23.8	0.0	498.7	28.5	4.6
South	514.4	41.2	6.6	492.5	29.4	1.0
West	460.3	17.3	1.2	488.0	23.8	0.0
Seychelles	**489.8**	**28.2**	**2.8**	**486.4**	**24.2**	**2.9**

2013	Rural			Urban		
Region	T-Score	Minimum Level (%)	Desirable Level (%)	T-Score	Minimum Level (%)	Desirable Level (%)
Central	x	x	x	479.5	22.5	0.9
East	497.1	34.2	2.2	x	X	x
Island	493.3	32.6	0.6	x	X	x
North	497.0	34.3	4.0	509.7	26.9	0.0
South	526.7	47.4	8.2	x	X	x
West	465.6	18.0	0.0	455.9	4.5	0.0
Seychelles	**496.5**	**33.6**	**2.9**	**479.5**	**21.3**	**0.7**

2021	Pupils Achieving		
Location	Std-Score Mean	Minimum Level (%)	Desirable Level (%)
Rural	436	14.0	3.9
Urban	425	8.3	0.1
Seychelles	430	11.0	1.9

Table 7.14: Mean performance (T-Score) on the HAKT and percentages of P6 pupils reaching the minimum and desirable levels of knowledge about HIV and AIDS by SES

2007	Low SES			High SES		
Region	T-Score	Minimum Level (%)	Desirable Level (%)	T-Score	Minimum Level (%)	Desirable Level (%)
Central	436.3	5.5	0.0	499.2	29.2	3.3
East	466.8	15.7	3.2	520.7	43.6	8.8
Island	466.0	12.0	0.0	504.3	35.1	10.1
North	478.5	20.4	2.6	520.6	36.5	5.7
South	453.1	16.1	0.0	533.0	40.5	7.4
West	430.0	2.7	0.0	502.3	32.4	5.9
Seychelles	**453.1**	**11.1**	**0.8**	**508.9**	**33.9**	**5.4**

2013	Low SES			High SES		
Region	T-Score	Minimum Level (%)	Desirable Level (%)	T-Score	Minimum Level (%)	Desirable Level (%)
Central	468.0	18.4	0.0	486.3	25.4	1.3
East	493.1	26.4	2.4	498.9	37.7	2.2
Island	496.4	39.2	0.0	493.5	28.6	1.0
North	487.7	24.6	2.9	503.8	36.6	3.5
South	504.5	34.6	4.1	541.9	54.9	10.5
West	472.2	18.2	0.0	457.3	12.2	0.0
Seychelles	**483.7**	**25.7**	**1.2**	**494.3**	**30.9**	**2.6**

2021	Pupils Achieving		
SES	Std-Score Mean	Minimum Level (%)	Desirable Level (%)
Low SES	419	8.6	1.2
High SES	440	13.0	2.6
Seychelles	**430**	**11.0**	**2.0**

Table 7.15: P6 Pupil achievement on HIV-AIDS Knowledge by School Ownership (SEACMEQ V)

2021	Pupils Achieving		
Ownership	Std-Score Mean	Minimum Level (%)	Desirable Level (%)
Public	425	9.3	1.4
Private	463	17.6	0.0
Seychelles	**430**	**11.0**	**1.9**

7.6.1 Mean performance on the HAKT and percentages of P6 pupils reaching the minimum and desirable levels of knowledge about HIV-AIDS by region (Table 7.11)

Standard Score Mean: In 2021, P6 pupils in all regions were taught HIV/AIDS knowledge that resulted in scores below the SEACMEQ Benchmark of 500. Nationally, P6 pupils averaged 430. P6 pupils in the North and West regions performed best with mean scores of 446 and 447 respectively, though these were still over 50 points below the desired benchmark. P6 pupils in the East region showed the weakest understanding, scoring 413, 87 points below the benchmark. This pattern mirrors regional performance in reading and mathematics, indicating P6 pupils across Seychelles are receiving HIV/AIDS education that fails to meet expected standards.

Minimum Level Achievement: The percentage of P6 pupils attaining basic HIV/AIDS knowledge peaked in 2013 in most regions before declining significantly. In 2007, only 34.4 percent of P6 pupils in the South and 33.0 percent in the Island regions reached minimum levels. By 2013, these figures rose to 46.5 percent (South region) and 36.5 percent (North), but by 2021, no region exceeded 18.6 percent of P6 pupils achieving this standard, with a national average of only 11.0 percent. The East region showed particular concern, where the percentage of P6 pupils with minimum knowledge dropped from 35.6 percent in 2013 to 6.9 percent in 2021.

Desirable Level Achievement: Desirable HIV/AIDS knowledge among P6 pupils remained alarmingly low in 2021, with only 1.9 percent reaching this level nationally. While the North region performed best (7.2 percent of P6 pupils), and the Island region followed (3.5 percent), other regions showed significant declines. The South region declined from 7.8 percent to 0.7 percent, and 0.0 percent of P6 pupils in the Central region schools demonstrated desirable knowledge levels. These results highlight gaps in health education delivery to P6 pupils across Seychelles.

7.6.2 Mean performance on the HAKT and percentages of P6 pupils reaching the minimum and desirable levels of knowledge about HIV-AIDS by Gender (Table 7.12)

Standard Score Mean: In 2021, P6 boys scored a mean of 418, which is 82 points below the SEACMEQ Benchmark of 500. P6 girls scored higher at 444 but still fell 56 points short. While P6 girls outperformed the national average of 430 by 14 points, and P6 boys underperformed by 12 points, neither gender groups among P6 pupils met the expected standards.

Minimum Level Achievement: The percentage of P6 pupils reaching the minimum level decreased significantly by 2021. In 2007, 21.7 percent of P6 boys and 29.3 percent of P6 girls achieved the minimum levels, improving slightly by 2013 (23.5% boys and 34.2%girls). By 2021, only 7.4 percent of P6 boys and 14.9 percent of P6 girls achieved this standard, both below the 2013 baseline and the national average of 11 percent. This suggests recent HIV-AIDS education has become less effective for P6 pupils of both genders.

Desirable Level Achievement: Desirable knowledge levels showed a decline. In 2007, 2.0 percent of P6 boys and 3.7 percent of P6 girls reached this level. By 2013, these figures declined to 1.6 percent and 2.5 percent respectively. In 2021, while P6 girls improved slightly to 3.1 percent (exceeding the 1.9 percent national average), boys declined further to 0.9 percent. These results suggest that very few P6 pupils, particularly boys, are developing advanced HIV-AIDS knowledge, hence the need to revamp HIV-AIDS education programmes.

7.6.3 Mean performance on the HAKT and percentages of P6 pupils reaching the minimum and desirable levels of knowledge about HIV-AIDS by School Location (Table 7.13)

Standard Score Mean: In 2021, P6 pupils from schools in rural areas (436) slightly outperformed their counterparts from schools in urban areas (425), though both groups fell below the SEACMEQ Benchmark of 500 (by 64 and 75 points respectively). P6 pupils from schools in rural areas exceeded the national average (430) while P6 pupils from urban areas trailed, revealing modest geographical disparities in HIV/AIDS education quality.

Minimum Level Achievement: P6 pupils from schools in rural areas showed stronger minimum knowledge overtime. From 2007 to 2013, P6 pupils from rural areas improved from 28.2 percent to 33.6 percent achieving minimum levels, while P6 pupils from schools in urban areas declined from 24.2 percent to 21.3 percent. By 2021, there was a sharp decline for both groups (14.0% of P6 pupils from rural areas and 8.3% from urban areas), though P6 pupils from rural areas remained above the Seychelles mean of 11.0 percent. The trend suggests rural P6 pupils may be having slightly more effective basic HIV/AIDS education.

Desirable Level Achievement: P6 pupils from schools in rural areas consistently outperformed in desirable knowledge level. From 2007 to 2021, schools from rural areas maintained or improved desirable achievement (2.8% to 3.9% of P6 pupils), while schools from urban areas declined (2.9% to 0.1% of P6 pupils). In 2021, P6 pupils from rural areas doubled the national average (1.9%), while P6 pupils from urban schools fell far below. This growing divide in HIV/AIDS education outcomes for P6 pupils demands attention.

7.6.4 Mean performance on the HAKT and percentages of P6 pupils reaching the minimum and desirable levels of knowledge about HIV-AIDS by SES level (Table 7.14)

Standard Score Mean: In 2021, P6 pupils from low SES backgrounds scored a mean of 419 (81 points below the SEACMEQ Benchmark), while High SES P6 pupils achieved 440, performing better than low SES pupils but still 60 points below the benchmark. Low SES P6 pupils underperformed the national mean (430) by 11 points, while high SES pupils slightly exceeded it by 10 points, revealing socioeconomic disparities in HIV/AIDS knowledge.

Minimum Level Achievement: Low SES P6 pupils peaked at 25.7 (2013) but dropped to 8.6 percent in 2021. High SES P6 pupils declined steadily from 33.9 percent in 2007 to 13.0 percent in 2021. Both groups struggled to achieve basic knowledge, with low SES P6 pupils below the national average of 11.0 percent and high SES P6 pupils only slightly above.

Desirable Level Achievement: Low SES P6 pupils showed marginal improvement (0.8% in 2007 to 1.2% in 2021), while High SES P6 pupils declined from 5.4 percent to 2.6 percent. In 2021, low SES P6 pupils trailed the national average of 2.0 percent, while high SES pupils slightly exceeded it. Overall, both groups displayed stagnation or decline, signalling a lack of progress in advanced knowledge.

In summary, the SEACMEQ V results indicate that significant reform is needed in HIV-AIDS education, as both low and high SES P6 pupils continue to underperform, with no sustained improvement.

7.6.5 Mean performance on the HAKT and percentages of P6 pupils reaching the minimum and desirable levels of knowledge about HIV-AIDS by School Ownership (Table 7.15)

Standard Score Mean: In 2021, P6 pupils in public schools scored a mean of 425 (75 points below the SEACMEQ Benchmark and 5 below the national mean), while private school P6 pupils scored 463 (37 points below the benchmark). Though private school P6 pupils performed better, these results suggest that P6 pupils in both public and private schools lack adequate HIV-AIDS knowledge.

Minimum level of HIV-AIDS knowledge: Only 9.3 percent of P6 pupils from public schools reached the minimum level, compared to 17.6 percent in private schools (exceeding the national mean of 11.0%). However, even private schools show a significant shortfall in ensuring basic proficiency for P6 pupils.

Desirable level of HIV-AIDS knowledge: Advanced knowledge levels was virtually absent, with only 1.4 percent of P6 pupils from public schools and 0 percent of P6 pupils from private school reaching the desirable level. These results demonstrate that the current HIV/AIDS education is not able to develop advanced comprehension among P6 pupils in both public and private schools.

7.7 Pupils Knowledge about Other Health Topics

In the evolving landscape of health education, understanding a broad spectrum of health topics is crucial for primary school pupils. The SEACMEQ V project expanded its assessment beyond HIV and AIDS to include 87 items, with a strong emphasis on 50 additional health topics. This chapter examines P6 pupils' knowledge on these topics, with detailed findings in Tables 7.16 and 7.17. By analysing P6 pupils' awareness, the effectiveness of health education can be assessed and areas for improvement identified.

Table 7.16: P6 Pupil achievement on other Health Topics Knowledge by Region (SEACMEQ V)

2021 Region	Pupils Achieving		
	Std-Score Mean	Minimum Level (%)	Desirable Level (%)
Central	515	34.1	1.8
East	487	23.2	0.9
Island	510	25.7	0.6
North	515	29.3	1.2
South	504	31.1	1.5
West	501	23.7	0.7
Seychelles	**507**	**29.2**	**1.3**

Table 7.17: P6 Pupil achievement on other Health Topics Knowledge by Gender, School Location, SES and School Ownership (SEACMEQ V)

2021 Subgroupings		Pupils Achieving		
		Std-Score Mean	Minimum Level (%)	Desirable Level (%)
Gender	Boys	494	23.6	0.9
	Girls	521	35.1	1.7
Location	Rural	499	25.4	1.1
	Urban	515	32.5	1.4
SES	Low SES	490	22.0	0.3
	High SES	522	35.2	1.9
Ownership	Public	502	26.9	0.8
	Private	580	63.5	9.5
	Seychelles	**507**	**29.2**	**1.3**

7.7.1 P6 Pupil achievement on other Health Topics Knowledge by region

Standard Score Mean: The national average for P6 pupils stands at 507, slightly above the SEACMEQ Benchmark of 500. Most regions performed above this benchmark, except for the East region, where P6 pupils scored 487. P6 pupils from both the Central and North regions achieved the highest scores at 515, exceeding the national average. P6 pupils from the Island region followed with a score of 510, while those from the South and West regions achieved 504 and 501 respectively, slightly above the SEACMEQ benchmark but below the national average.

Minimum Level Achievement: The Seychelles average for P6 pupils stood at 29.2 percent. The Central region led with 34.1 percent of P6 pupils reaching the minimum level, followed closely by the South (31.1% of P6 pupils) and the North (29.3% of P6 pupils), all surpassing the national average. The Island region recorded 25.7 percent of P6 pupils achieving the minimum level, while those from the West (23.7%) and East (23.2%) performed the weakest.

Desirable Level Achievement: The national average of 1.3 percent of P6 pupils reflected a general lack of advanced health knowledge. The Central region again outperformed other regions, with 1.8 percent of P6 pupils reaching the desirable level, followed by the South (1.5% of P6 pupils) and North (1.2% of P6 pupils). The East, West and Island regions fell below the national average, with scores of 0.9 percent, 0.7 percent and 0.6 percent of P6 pupils, respectively, achieving this level. This shows that the desirable level of health knowledge remains rare across all regions.

While most regions met the benchmark for the Standard Score Mean, disparities in P6 pupils' achievement at the minimum and desirable levels suggest a need for targeted interventions.

7.7.2 P6 Pupil achievement on other Health Topics Knowledge by gender

P6 girls outperformed boys in health topics knowledge, with a Standard Score Mean of 521 compared to 494 for boys. P6 boys' performance fell below the benchmark of 500 and the national average of 507.

At the minimum level, 35.1 percent of P6 girls achieved this threshold, compared to 23.6 percent of P6 boys. Girls performed well above the national average of 29.2 percent, while boys fell below it.

For the desirable level, 1.7 percent of P6 girls reached this standard, compared to 0.9 percent of P6 boys. Both figures remain low, but girls exceeded the national average of 1.3 percent, while boys fell below it. This highlights a consistent gender gap favouring P6 girls in health knowledge.

7.7.3 Pupil achievement on other Health Topics Knowledge by school location

P6 pupils from schools in urban areas performed better than those in rural schools. Their Standard Score Mean was 515, surpassing the national average of 507 and the benchmark of 500. In contrast, P6 pupils from rural schools scored 499, slightly below the benchmark.

At the minimum level, 32.5 percent of P6 pupils from urban schools reached this threshold, compared to 25.4 percent from rural schools. The national average stood at 29.2 percent, showing urban pupils' stronger performance.

For the desirable level, 1.4 percent of P6 pupils from urban schools achieved this standard, compared to 1.1 percent of their peers from rural schools. Both figures hovered near the national average of 1.3 percent, with P6 pupils from urban schools showing a slight advantage.

7.7.4 Pupil achievement on other Health Topics Knowledge by SES

Socioeconomic status (SES) significantly influenced P6 pupils' achievement. High SES P6 pupils achieved a Standard Score Mean of 522, surpassing both the national average of 507 and the SEACMEQ Benchmark of 500. Low SES P6 pupils scored 490, falling below the benchmark.

At the minimum level, 35.2 percent of high SES P6 pupils achieved this standard, outperforming both the national of 29.2 percent and the 22.0 percent of low SES P6 pupils who met this level. This emphasizes a disparity, with high SES P6 pupils demonstrating stronger basic health knowledge.

The desirable level of knowledge showed an even wider gap: 1.9 percent of high SES P6 pupils achieved this level, compared to just 0.3 percent of low SES P6 pupils. This vast difference underscores how SES impacts P6 pupils' ability to attain advanced health knowledge.

7.7.5 P6 Pupil achievement on other Health Topics Knowledge by school ownership

P6 pupils in private school performed exceptionally well, with a Standard Score Mean of 580, far surpassing the national average of 507 and the SEACMEQ benchmark of 500. In contrast, P6 from public schools averaged of 502, just above the benchmark but below the national mean.

At the minimum level, 63.5 percent of private school P6 pupils met the threshold, more than double the national average of 29.2 percent. This sharply contrasted with the 26.9 percent of P6 pupils from public schools, who performed below the national average.

For the desirable level, 9.5 percent of P6 pupils from private school reached this standard, significantly higher than the 0.8 percent P6 pupils in public schools and the national average of 1.3 percent. These results highlight a pronounced advantage for private school P6 pupils in both basic and advanced health knowledge.

Policy Suggestion 7.8: Integrate HIV-AIDS education into a broader, comprehensive health education curriculum, supported by continuous teacher training to enhance instructional quality and pupil understanding across all knowledge levels.

Policy Suggestion 7.9: Strengthen partnerships with health organisations and community stakeholders to promote HIV/AIDS awareness beyond the classroom, fostering a comprehensive and supportive approach to health education.

Policy Suggestion 7.10: Implement an equity-focused HIV-AIDS education reform that prioritizes inclusive resources and interventions, gender-responsive programmes and shares successful strategies from high performing schools to address disparities across different demographics.

Conclusion

The analysis of the 2021 SEACMEQ V results reveals a concerning decline in P6 pupils' reading and mathematics achievement across regions, genders, school locations and socio-economic groups. Nationally, P6 pupils' mean scores remained above the SEACMEQ benchmark, but significant regional declines were noted, particularly in reading, with COVID-19 disruptions possibly impacting performance. P6 girls continued to outperform P6 boys, though the mathematics gap narrowed due to a larger decline in P6 girls' scores. Urban-rural disparities persisted, with P6 pupils from schools in urban areas consistently outperforming those from schools in rural areas, especially in reading. While the socio-economic gap, though reduced since early 2000s, it widened in 2021, emphasizing the need for targeted support for low SES P6 pupils.

In 2021, fewer P6 pupils reached advanced levels in reading compared to previous years, with certain regions, particularly the East and West, having high percentages of P6 pupils at only the basic level. Mathematics showed similar trends: while basic numeracy improved among P6 pupils, advanced skills remained low, indicating a need for stronger foundational numeracy and advanced skill-building strategies. P6 pupils in private schools consistently outperformed those in public schools, with all private school P6 pupils reaching acceptable competence levels and many achieving advanced levels, especially in reading.

Teachers of P6 pupils showed significant improvements in reading competence across most regions in 2021, with an increased national mean and particularly high scores in the West, North and South. Despite these gains, disparities persist, as the East and Islands regions still fall below the national mean, indicating a need for targeted literacy support for P6 pupils. Conversely, the mathematics performance for teachers of P6 pupils declined nationally, with the East and Island regions showing the sharpest declines, highlighting the need for renewed efforts in mathematics training for teachers of P6 pupils. Private school teachers of P6 pupils had a slight edge in reading and consistently attained Level 8 in mathematics, contrasting with a broader skill range among public school teachers of P6 pupils. These trends underscore the importance of strengthening mathematics pedagogy and providing targeted regional support to sustain high competency levels among teachers of P6 pupils across Seychelles.

HIV/AIDS knowledge results also highlighted concerning trends: P6 pupils consistently underperformed relative to the SEACMEQ benchmark of 500, with no group of P6 pupils reaching

this target. Regionally, the distribution of P6 pupils in the North and West performed better but still fell short, while those in the East saw the steepest decline, mirroring underperformance in reading and mathematics. P6 girls outperformed P6 boys in HIV/AIDS knowledge, though both groups showed declines, particularly in reaching minimum and desirable levels. By school location, P6 pupils from schools in rural areas outpaced those from schools in urban areas, but both groups saw declines. Socioeconomic performance reflected similar struggles, with both high and low SES P6 pupils failing to maintain past gains. P6 pupils in private schools performed better than those in public schools but still did not achieve proficiency at the minimum or desirable knowledge levels. Across all categories, the results signal an urgent need for enhanced educational strategies to better equip P6 pupils with essential HIV/AIDS knowledge, reflecting broader challenges in Seychelles' educational outcomes among P6 pupils.

On the other hand, while the national average for P6 pupils' health topics knowledge exceeded the SEACMEQ benchmark, regional differences were notable, with the distribution of P6 pupils in the Central and North regions leading and those from the East lagging. Gender comparisons revealed P6 girls outperforming P6 boys across all levels. P6 pupils from schools in urban areas generally scored higher than those from schools in rural areas, and high SES P6 pupils showed stronger health knowledge than their low SES P6 counterparts. A significant advantage was observed for P6 pupils in private schools, who outperformed those in public schools in both basic and advanced health knowledge. These findings underscore the need for targeted interventions to address disparities and enhance P6 pupils' understanding across regions and demographics.

Chapter 8: Stigmatization, Attitude and Opinions about HIV and AIDS

8.1 Introduction

Since the first HIV-AIDS case reported in 1981, the epidemic has disproportionately impacted sub-Saharan Africa, particularly Southern and Eastern regions (UNAIDS, 2022). Many of these regions participate in SEACMEQ projects. These Southern and Eastern African regions account for 54 percent (26 million people) of global HIV cases, though new infections declined by 44 percent from 2010 to 2021, with a 38 percent decline among women and a 52 percent decline among men. Women and girls remain highly affected, constituting 63 percent of new infections in Southern and Eastern Africa in 2021, with adolescent girls and young women (aged 15 – 24) acquiring new infections at three times the rate of their male counterparts.

In Seychelles, 969 people live with HIV/AIDS (PLHIV), with 59 new cases reported in 2021, reflecting a decrease from previous years (annual Health Sector Performance Report 2021: 42-43). Those included 20 children under fifteen years of age, 630 male and 319 female aged fifteen years and above. Financial pressures, exacerbated by the COVID-19 pandemic and the war in Ukraine, threatens the resilience of HIV responses worldwide. In 2021, the international funding for HIV was 6 percent lower in 2021 compared to 2010 [UNAIDS Global AIDS Update (2022: 9-10)]. Despite advances in treatment, there is still no cure for AIDS, and a vaccine for HIV remains under development.

Education remains key to HIV prevention, and SEACMEQ Ministries of Education have implemented programmes targeting primary school children, as they offer the opportunity to reach children before they become sexually active or engage in high-risk behaviors. However, SACMEQ IV revealed rising stigma and misconceptions (Leste & Benstrong, 2013).

This chapter analyzes attitudes towards HIV-infected individuals and the perceptions of HIV risks within the school environment, drawing insights from SEACMEQ V.

8.2 Attitude towards friends and relatives infected with HIV

Stigma and discrimination related to HIV/AIDS hinder efforts to combat the disease, often stemming from misconceptions about its causes. The SEACMEQ V study, akin to its predecessors in the SACMEQ series, examined attitudes within the primary school community toward HIV/AIDS. The evaluation involved gathering responses from P6 pupils, teachers, and school heads regarding their views on the disease.

Tables 8.1(a) and 8.1(b) show P6 pupil attitudes by region over three SACMEQ cycles (III, IV and V), while Figures 8.1(a) and 8.1(b) present attitudes by gender and location for SEACMEQ V.

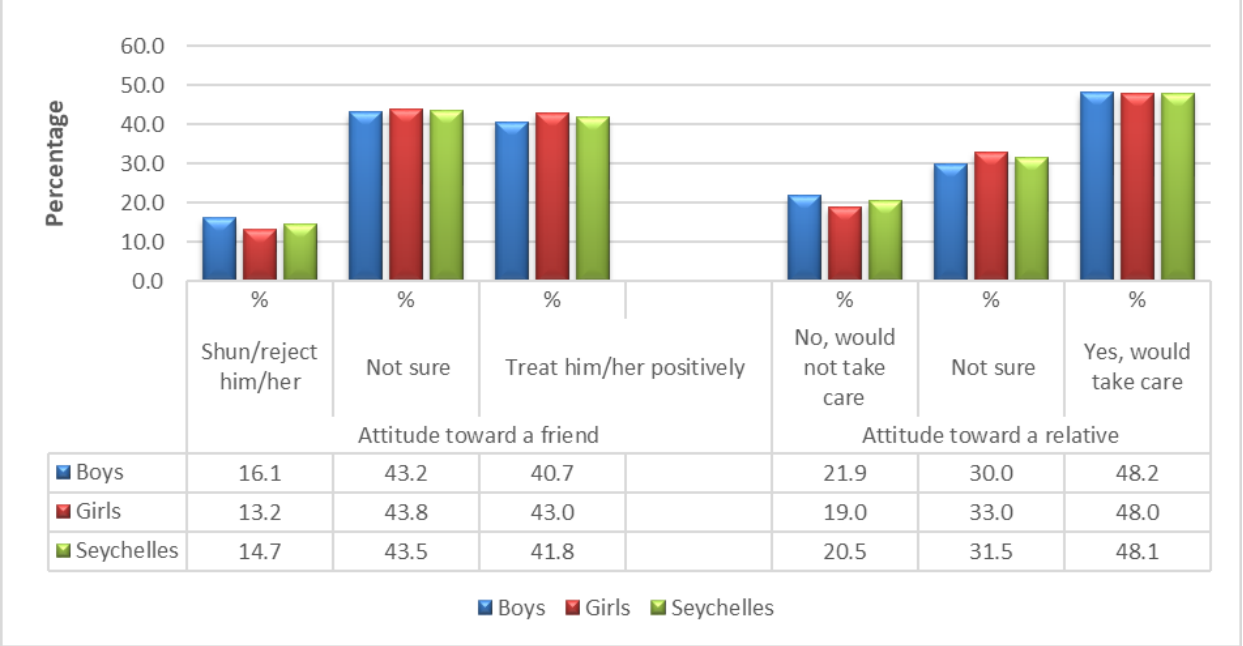
Table 8.1(a) P6 Pupils Attitude toward Friends Infected with HIV by Region

Region	SACMEQ III (2007)			SACMEQ IV (2013)			SEACMEQ V (2021)		
	Shun/reject him/her	Not sure	Treat him/her positively	Shun/reject him/her	Not sure	Treat him/her positively	Shun/reject him/her	Not sure	Treat him/her positively
	%	%	%	%	%	%	%	%	%
Central	17.8	51.5	30.7	20.2	54.2	25.5	16.1	43.7	40.2
East	10.1	56.8	33.0	8.6	57.0	34.4	16.5	38.7	44.8
Island	10.2	62.0	27.9	17.5	47.6	34.9	11.3	44.0	44.6
North	11.3	53.4	35.2	13.5	56.3	30.2	12.2	40.2	47.6
South	14.7	48.1	37.3	12.7	52.4	34.9	19.4	50.4	30.2
West	13.8	57.5	28.7	19.8	52.6	27.6	9.4	47.5	43.2
Seychelles	**13.9**	**54.3**	**31.8**	**16.3**	**53.6**	**30.1**	**14.7**	**43.5**	**41.8**

Table 8.1(b) P6 Pupils Attitude toward Relatives Infected with HIV by Region

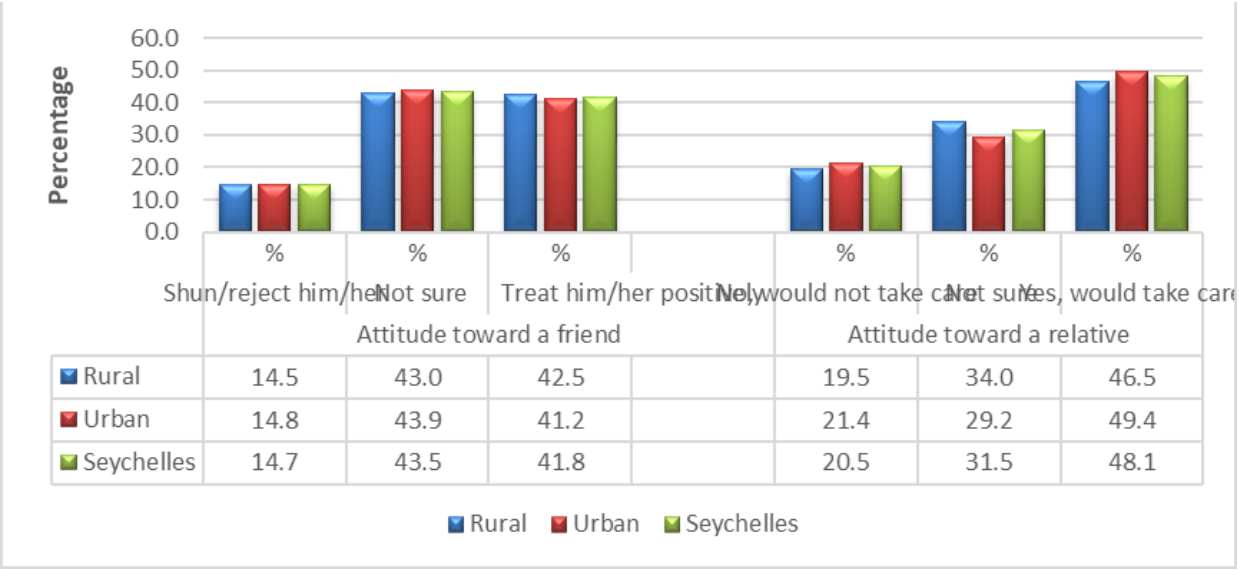
Region	SACMEQ III (2007)			SACMEQ IV (2013)			SEACMEQ V (2021)		
	Shun/reject him/her	Not sure	Treat him/her positively	Shun/reject him/her	Not sure	Treat him/her positively	Shun/reject him/her	Not sure	Treat him/her positively
	%	%	%	%	%	%	%	%	%
Central	15.7	41.8	42.5	17.3	40.6	42.1	24.6	29.5	45.9
East	18.5	32.4	49.2	26.6	33.5	39.8	23.5	27.0	49.6
Island	14.7	38.1	47.2	12.6	30.6	56.8	16.8	35.9	47.3
North	15.6	34.6	49.8	20.7	44.8	34.5	12.8	28.7	58.5
South	15.8	28.3	55.8	16.6	60.0	23.4	20.0	39.2	40.8
West	16.9	52.8	30.3	22.1	42.4	35.5	15.2	36.2	48.6
Seychelles	**16.1**	**38.8**	**45.1**	**19.1**	**41.2**	**39.7**	**20.5**	**31.5**	**48.1**

Figure 8.1(a) P6 Pupils Attitude toward Friends and Relatives Infected with HIV by Gender



	% Shun/reject him/her	% Not sure	% Treat him/her positively	% No, would not take care	% Not sure	% Yes, would take care
	Attitude toward a friend			Attitude toward a relative		
Boys	16.1	43.2	40.7	21.9	30.0	48.2
Girls	13.2	43.8	43.0	19.0	33.0	48.0
Seychelles	14.7	43.5	41.8	20.5	31.5	48.1

Figure 8.1(b) P6 Pupils Attitude toward Friends and Relatives Infected with HIV by Location



	% Shun/reject him/her	% Not sure	% Treat him/her positively	% No, would not take care	% Not sure	% Yes, would take care
	Attitude toward a friend			Attitude toward a relative		
Rural	14.5	43.0	42.5	19.5	34.0	46.5
Urban	14.8	43.9	41.2	21.4	29.2	49.4
Seychelles	14.7	43.5	41.8	20.5	31.5	48.1

8.2.1 Distribution of Pupils by Attitude toward Friends Infected with HIV by Region

The data shows a gradual improvement in P6 pupils' attitudes toward HIV-infected friends from 2007 to 2021. Positive attitudes among P6 pupils increased from 31.8 percent in 2007 to 41.8 percent in 2021, while uncertainty decreased from 54.3 percent to 43.5 percent. The rejection rate, which rose to 16.3 percent in 2013, declined to 14.7 percent in 2021. The overall trend suggests a gradual improvement in the P6 pupils' overall perception and acceptance of friends living with HIV, although a major proportion remain unsure.

Most regions (Central, East, Island, North and West) demonstrated improved acceptance by 2021. The South region, however, showed regression, with only 30.2 percent of P6 pupils expressing positive attitudes, 50.4 percent unsure and 19.4 percent expressing rejection.

8.2.2 Distribution of P6 Pupils by Attitude toward Relatives Infected with HIV by Region

The attitudes of P6 pupils in Seychelles toward caring for relatives infected with HIV reveal a nuanced picture of societal perspectives over the years. While some regions have shown improvements in the willingness to care for HIV-infected relatives, others reflect persistent challenges in overcoming stigma and uncertainty.

The data highlights that P6 pupils' willingness to care for an HIV-infected relative increased from 45.1 percent in 2007 to 48.1 percent in 2021, despite fluctuations in 2013 where it decreased to 39.7 percent. Uncertainty among P6 pupils decreased from 38.8 percent to 31.5 percent, though rejection increased from 16.1 percent to 20.5 percent. Positive trends were observed among P6 pupils in most regions, with the North showing the highest acceptance in 2021. P6 pupils in the West region displayed consistent improvement, with acceptance rising from 30.3 percent in 2007 to 48.6 percent in 2021. Concurrently, a consistent decline in uncertainty was observed, decreasing from 52.8 percent in 2007 to 36.2 percent in 2021. However, uncertainty remained high in the West compared to other regions. P6 pupils in the South region continued to struggle with high uncertainty and rejection rates.

8.2.3 Distribution of P6 Pupils by Attitude toward Friends and Relatives Infected with HIV by Gender

P6 boys exhibited higher rejection (16.1%) rate towards a friend infected with HIV compared to girls. The uncertainty rate (43.3%) was slightly lower than the 43.8 percent exhibited by the P6 girls. The rejection rate for P6 boys was also higher than the national average of 14.7 percent and the uncertainty rate was closely aligned with the national average of 3.5 percent. Only 40.7 percent of P6 boys showed positive attitudes, below the national average of 41.8%. In contrast, P6 girls displayed positive attitudes, with lower rejection (13.2%) compared to P6 boys.

For caring for HIV-infected relatives, 21.9 percent of P6 boys rejected this responsibility, above the national average of 20.5 percent. The P6 girls demonstrated lower rejection (19.0%) but higher uncertainty (33.0%). Despite this, 48.0 percent of P6 girls said they would take care of a relative, nearly identical to the national average (48.1%) but slightly lower than the figure for the P6 boys (48.2%). Both genders reflect national trends, with P6 girls showing more compassionate attitudes.

8.2.4 Distribution of P6 Pupils by Attitude toward Friends and Relatives Infected with HIV by Location

In rural areas, 14.5 percent P6 pupils rejected friends with HIV, while 43.0 percent were unsure. These figures were slightly below the national average of 14.7 percent and 43.5 percent respectively. A notable 42.5 percent of P6 pupils from rural areas indicated that they would treat a friend positively, which was higher than both the national average (41.8%) and the corresponding figure for pupils from urban areas (41.2%).

P6 pupils from urban areas showed lower rejection rates (14.8%), slightly above the national average, but showed a higher level of uncertainty (43.9%). Only 41.2 percent of the P6 pupils from urban areas would treat a friend positively, which was lower than both the national average (41.8%) and the rate for P6 pupils in rural areas (42.5%).

Data on attitudes toward caring for relatives infected with HIV revealed notable differences. Among P6 pupils from rural areas, 19.5 percent indicated that they would not care for a relative, which is lower than the national average (20.5%) and pupils from urban areas (21.4%). Meanwhile, 46.5 percent of P6 pupils in rural areas said they would care for an infected relative, a figure below the national average (48.1%) and urban pupils (49.4%). However, 34.0 percent of P6 pupils from

rural areas were uncertain, a rate higher than both the national average (31.5%) and P6 pupils from urban areas (29.2%).

Overall, P6 pupils from urban areas demonstrated a greater likelihood of rejecting caregiving but also showed more decisiveness and a stronger sense of duty toward relatives. In contrast, P6 pupils from rural areas were more accepting of friends but displayed higher uncertainty about caregiving responsibilities.

8.3 Opinions towards other pupils infected with HIV

Pupils, teachers and school heads were surveyed to determine whether a pupil infected with HIV should be permitted to continue attending school. Respondents could select from three options: "No", "Not Sure" or "Yes". The distribution of their responses across the six education regions is detailed in tables 8.2(a), 8.2(b) and 8.2(c) respectively for 2007, 2013 and 2021.

Table 8.2(a) P6 Pupils Opinions on HIV infected pupils being allowed in schools by Region

Region	SACMEQ III (2007)			SACMEQ IV (2013)			SEACMEQ V (2021)		
	No %	Not sure %	Yes %	No %	Not sure %	Yes %	No %	Not sure %	Yes %
Central	44.6	22.3	33.1	43.7	33.9	22.4	56.4	29.4	14.2
East	30.9	26.3	42.8	43.9	34.7	21.4	57.6	26.0	16.5
Island	34.9	36.6	28.5	44.8	22.8	32.4	24.6	36.5	38.9
North	46.4	26.6	27.1	33.1	45.3	21.5	38.4	33.5	28.0
South	35.6	26.6	37.9	33.6	41.2	25.2	48.1	19.8	32.1
West	30.8	41.1	28.1	44.1	43.4	12.5	36.7	23.7	39.6
Seychelles	**38.8**	**28.3**	**32.9**	**41.4**	**36.2**	**22.4**	**47.4**	**28.7**	**23.9**

Table 8.2(b) Percentages of P6 pupils by their Teachers' Opinions on HIV infected pupils being allowed in schools and Region

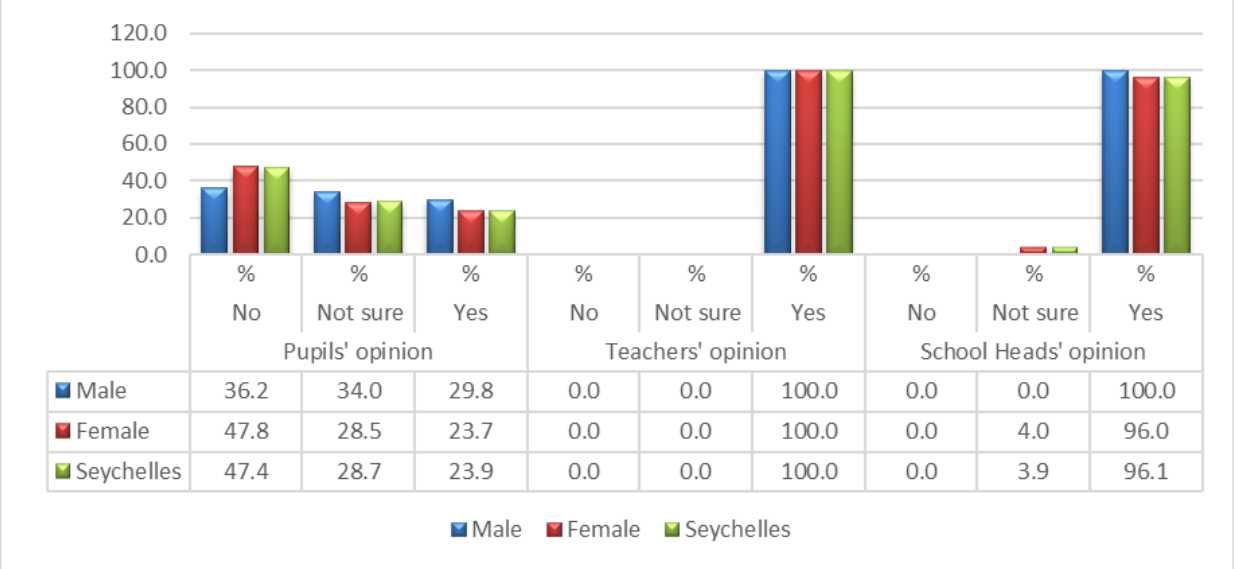
Region	SACMEQ III (2007)			SACMEQ IV (2013)			SEACMEQ V (2021)		
	No %	Not sure %	Yes %	No %	Not sure %	Yes %	No %	Not sure %	Yes %
Central	0.0	10.4	89.6	0.0	0.0	100.0	0.0	0.0	100.0
East	0.0	22.9	77.1	0.0	0.0	100.0	0.0	0.0	100.0
Island	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0
North	0.0	0.0	100.0	0.0	13.1	86.9	0.0	0.0	100.0
South	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0
West	0.0	51.9	46.1	0.0	59.4	48.1	0.0	0.0	100.0
Seychelles	**0.0**	**13.5**	**86.5**	**0.0**	**8.3**	**91.7**	**0.0**	**0.0**	**100.0**

Table 8.2(c) Distribution of P6 pupils by their School Heads' Opinions on HIV infected pupils being allowed in schools and Region

Region	SACMEQ III (2007)			SACMEQ IV (2013)			SEACMEQ V (2021)		
	No %	Not sure %	Yes %	No %	Not sure %	Yes %	No %	Not sure %	Yes %
Central	0.0	9.9	90.1	0.0	27.4	72.6	0.0	0.0	100.0
East	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0
Island	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0
North	0.0	17.0	83.0	0.0	0.0	100.0	0.0	0.0	100.0
South	0.0	0.0	100.0	0.0	0.0	100.0	0.0	38.5	61.5
West	0.0	18.2	81.8	0.0	0.0	100.0	0.0	0.0	100.0
Seychelles	**0.0**	**8.1**	**91.9**	**0.0**	**10.8**	**89.2**	**0.0**	**3.9**	**96.1**

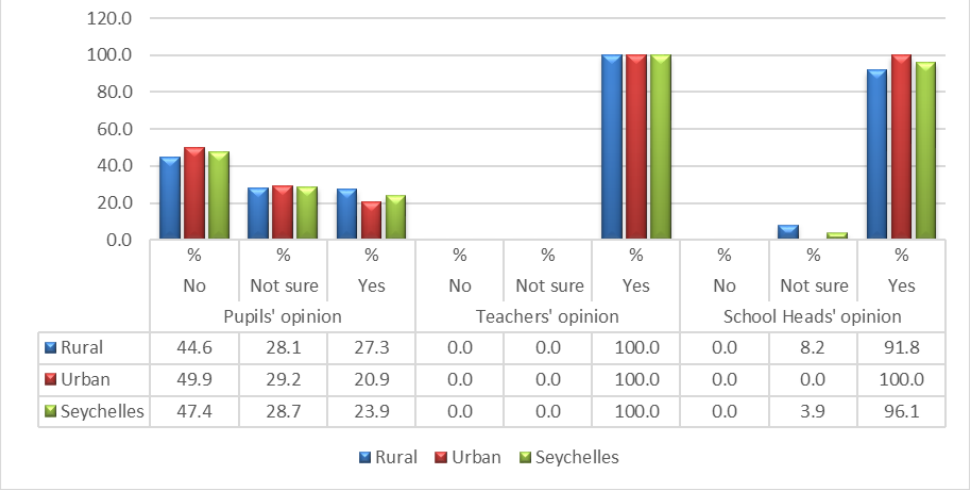
Figures 8.2(a) and 8.2(b) display pupils, teachers and school heads responses by gender and location respectively for further understanding of the distribution of pupils towards other pupils infected with HIV.

Figure 8.2(a) Distribution of P6 pupils by their, teachers and school heads opinions towards other pupils infected with HIV to attend school by Gender



	% No	% Not sure	% Yes	% No	% Not sure	% Yes	% No	% Not sure	% Yes
	Pupils' opinion			Teachers' opinion			School Heads' opinion		
Male	36.2	34.0	29.8	0.0	0.0	100.0	0.0	0.0	100.0
Female	47.8	28.5	23.7	0.0	0.0	100.0	0.0	4.0	96.0
Seychelles	47.4	28.7	23.9	0.0	0.0	100.0	0.0	3.9	96.1

Figure 8.2(b) Distribution of P6 pupils by their, teachers and school heads opinions towards other pupils infected with HIV to attend school by Location



	% No	% Not sure	% Yes	% No	% Not sure	% Yes	% No	% Not sure	% Yes
	Pupils' opinion			Teachers' opinion			School Heads' opinion		
Rural	44.6	28.1	27.3	0.0	0.0	100.0	0.0	8.2	91.8
Urban	49.9	29.2	20.9	0.0	0.0	100.0	0.0	0.0	100.0
Seychelles	47.4	28.7	23.9	0.0	0.0	100.0	0.0	3.9	96.1

8.3.1 Distribution of P6 Pupils by Their Opinions on HIV-infected Pupils Allowed in Schools by Region

The distribution of P6 pupils' opinions on allowing HIV-infected pupils in schools shows a national trend of increasing opposition from 2007 to 2021. In 2007, 38.8 percent of P6 pupils opposed inclusion, 28.3 percent were uncertain, and 32.9 percent supported it. By 2021, opposition rose to 47.4 percent, uncertainty increased to 28.7 percent and support fell to 23.9 percent.

Regionally, opposition among P6 pupils increased in most regions (Central, East, South and West), particularly in the East (from 30.9% in 2007 to 57.6% in 2021). However, the Island and North regions saw declines in opposition (Island: 34.9% to 24. 6% and North: 46.4% to 38.4%). The Central region consistently displayed higher opposition among P6 pupils than the national average, indicating stronger resistance there. Uncertainty levels among P6 pupils varied across regions in 2021, with the Island (36.5%), North region (33.5%) and Central (29.4%) regions exceeding the national average (28.7%). Meanwhile, uncertainty among P6 pupils decreased in the South (26.6% to 19.8%) and West (41.1% to 23.7%).

Support for inclusion among P6 pupils decreased nationally from 2007 to 2021 and sharply in the Central (33.1% to 14.2%) and the East (42.8% to 16.5%) regions. However, the distribution of P6 pupils in the Island region showed consistent growth in support (28.5% to 38.9%), while the North and West regions also saw slight increases in support by 2021 (North: 27.1% to 28.0% and West:28.1% to 39.6%).

8.3.2 Distribution of P6 Pupils by their Teachers' Opinions on HIV-infected Pupils Allowed in Schools and Region

The distribution of P6 pupils by their teachers' opinions shows strong national for allowing HIV-infected pupils in schools. In 2007, 86.5 percent of P6 pupils were taught by teachers who supported inclusion, 13.5 percent were taught by teachers who were unsure, and none were taught by teachers who opposed it. By 2021, 100 percent of P6 pupils were taught by teachers who supported inclusion.

Regional disparities in 2007, where 86.9 percent of P6 pupils in the Central region, 77.1 percent in the East and 46.1 percent in the West were taught by teachers who supported inclusion, were eliminated by 2021, when all P6 pupils across regions were taught by teachers who fully supported inclusion. The West showed steady improvement (from 46.1% of P6 pupils in 2007 to 100.0% in 2021). The North saw a dip in 2013 (86.9% of P6 pupils taught by supportive teachers) before regaining full support by 2021.

8.3.3 Distribution of P6 Pupils by School Heads' Opinions on HIV-infected Pupils Allowed in Schools by Region

The data reflects increasing national support among school heads, with 91.9 percent of P6 pupils in 2007 attending schools where school heads supported inclusion, rising to 96.1 percent in 2021. Uncertainty among school heads decreased (from 8.1 percent of P6 pupils in schools with uncertain school heads in 2007 to 3.9 percent in 2021), and no pupils were in schools where school heads opposed inclusion across the three periods.

In 2007, 100 percent of P6 pupils in the East, Island and South regions attended schools with fully supportive school heads, while coverage was lower in the Central (90.1%), North (83.0%) and West (81.8%). By 2013, all regions except Central (72.6% of P6 pupils in schools with supportive school heads) achieved full support. In 2021, the Central, Island, North, East and West regions returned to 100.0 percent support, but the South region dropped to 61.5 percent of P6 pupils in schools with supportive school heads, contributing to the national uncertainty rate of 3.9 percent.

8.3.4 Distribution of P6 Pupils by pupils, teachers and school heads opinions towards other pupils infected with HIV to attend school by Gender

In 2021, 47.4 percent of P6 pupils opposed allowing HIV-infected peers in schools, 28.7 percent were unsure, and 23.9 percent supported inclusion. Female pupils were more opposed (47.8 percent) than males (36.2%), while males exhibited higher uncertainty (34.0% vs 28.5%).

Teachers, regardless of gender, who supported inclusion, taught 100 percent of P6 pupils. The distribution of P6 pupils among school heads opinions showed that 100.0 percent were in schools where male school heads supported inclusion and 96.0 percent were in schools where female school heads supported it, with 4.0 percent in schools where female school heads were uncertain.

8.3.5 Distribution of P6 Pupils by pupils, teachers and school heads opinions towards other pupils infected with HIV to attend school by Location

In 2021, 47.4 percent of P6 pupils nationally opposed inclusion, with P6 pupils from rural areas less opposed (44.6%) than P6 pupils from urban areas (49.9%). Support was higher in rural areas (27.3% of P6 pupils) compared to urban areas (20.9% of P6 pupils).

100.0 percent of P6 pupils were taught by teachers who supported inclusion. Similarly, 96.1 percent of of P6 pupils attended schools were school heads supported inclusion, with 3.9 percent in schools with uncertain school heads and none in schools with heads opposing the idea. Location did not significantly influence teachers or school heads' stances on the issue.

8.4 Opinions towards employment of teachers infected with HIV

Pupils, teachers, and school heads were surveyed to gauge opinions on whether a teacher infected with HIV should be allowed to teach. Participants were given the option to respond with "No", "Not Sure" or "Yes". The distribution of P6 pupils by their responses from the SEACMEQ V (2021) study, categorized by the six education regions, are detailed in table 8.3. Figures 8.4 (a) and 8.4(b) further display the distribution of P6 pupils by their, teachers and school heads responses by gender and location respectively.

Table 8.3 Percentage of P6 pupils' opinions on HIV infected teachers being allowed to teach by Region for 2021

Region	Pupils' Opinions			Teachers' Opinions			School Heads' Opinions		
	No %	Not sure %	Yes %	No %	Not sure %	Yes %	No %	Not sure %	Yes %
Central	61.4	26.2	12.4	0.0	0.0	100.0	0.0	0.0	100.0
East	61.7	21.7	16.5	0.0	0.0	100.0	0.0	0.0	100.0
Island	31.0	28.6	40.5	0.0	0.0	100.0	0.0	0.0	100.0
North	35.4	40.9	23.8	0.0	0.0	100.0	0.0	0.0	100.0
South	44.3	18.3	37.4	0.0	0.0	100.0	0.0	38.5	61.5
West	41.7	33.8	24.5	0.0	0.0	100.0	0.0	0.0	100.0
Seychelles	**50.6**	**27.6**	**21.9**	**0.0**	**0.0**	**100.0**	**0.0**	**3.9**	**96.1**

Figure 8.3(a) Percentage of P6 pupils by their, teachers and school heads opinions towards teachers infected with HIV being allowed to teach by Gender for 2021

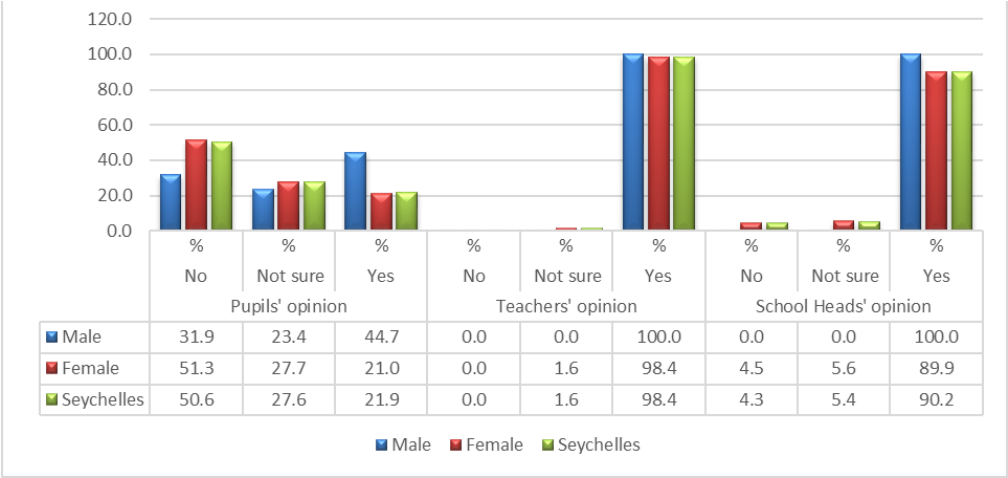
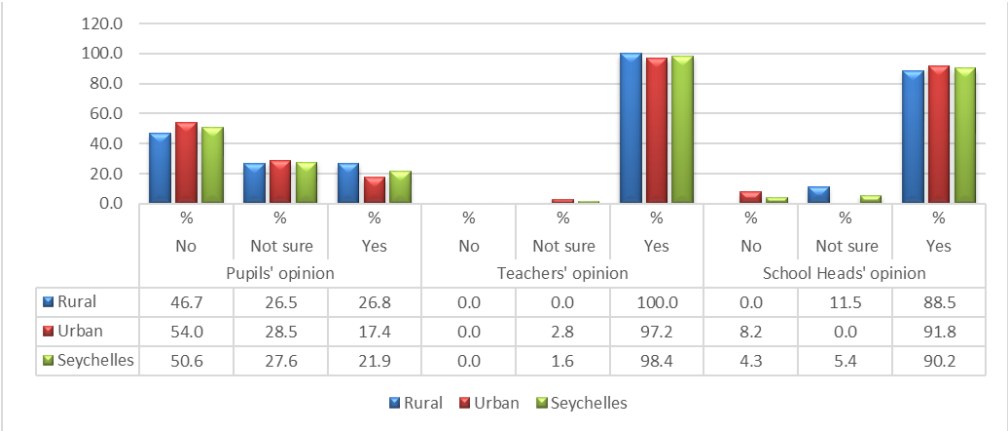


Figure 8.3(b) Pupils, teachers and school heads opinions towards teachers infected with HIV being allowed to teach by Location for 2021



8.4.1 Distribution of P6 Pupils by pupils, teachers and school heads opinions on teachers infected with HIV being allowed to teach by Region

In 2021, 50.6 percent of P6 pupils opposed allowing HIV-infected teachers to teach, 27.6 percent were unsure, and 21.9 percent supported the idea. All P6 pupils (100%) were taught by teachers who supported HIV-infected teachers continuing to teach, while 96.1 percent of P6 pupils attended schools where their heads approved of HIV-infected teachers, with only 3.9 percent in schools with uncertain school heads. No P6 pupils were in schools where school heads or teachers opposed HIV-infected teachers being allowed to teach.

Regionally, opposition was highest amongst P6 pupils in the East (61.7%) and Central (61.4%) regions, surpassing the national average of 50.6 percent. The Island region had the least opposition (31.0% of P6 pupils) and the most support (40.5% of P6 pupils), followed by the South (37.4% of P6 pupils) and West (24.5% of P6 pupils) regions. The Central (12.4% of P6 pupils) and East (16.5% of P6 pupils) regions had the lowest support levels. P6 pupils in the North (40.9%) and West (33.8%) regions showed the highest uncertainty levels. Teachers who supported the idea taught all P6 pupils across regions. Among school heads, all regions showed full approval except the South, where only 61.5 percent of P6 pupils were in schools where school heads approved, and 38.5 percent were in schools with uncertain school heads.

8.4.2 Distribution of P6 Pupils by pupils, teachers and school heads opinions on teachers infected with HIV being allowed to teach by Gender

Male P6 pupils were more supportive (44.7%) than females (21.0%), while female pupils showed higher opposition (51.3%) than males (31.9%). Uncertainty was similar across genders (27.7% female and 23.4% male).

All P6 pupils were taught by male teachers who expressed approval, while 98.4 percent of P6 pupils were taught by female teachers who supported the idea, 1.6 percent by unsure teachers, and none by teachers expressing disapproval. Among school heads, 90.2 percent of P6 pupils attended schools where school heads were supportive of inclusion. All P6 pupils were in schools with supportive male school heads, while 89.9 percent of P6 pupils in female-headed schools had supportive school heads, 5.6 percent with uncertain school heads and 4.5 percent with opposing school heads.

8.4.3 Distribution of P6 Pupils by pupils, teachers and school heads opinions on teachers infected with HIV being allowed to teach by Location

In 2021, P6 pupils from rural areas were more supportive (26.8%) than P6pupils from urban areas (17.4%), while P6 pupils from urban areas (54.0%) than P6 pupils from rural areas (46.7%). Uncertainty was quite similar across locations (28.5% of P6 pupils from urban areas and 26.5% from rural areas).

All P6 pupils (100.0%) were taught by teachers who were supportive of allowing HIV-infected teachers to teach, while 97.2 percent of P6 pupils from urban areas had supportive teachers and 2.8 percent had teachers who were unsure. Among school heads, 88.5 percent of P6 pupils from rural areas were in schools where school heads supported inclusion of HIV-infected teachers and 11.5 percent attending schools where school heads were unsure, compared to 91.8 percent of P6 pupils from urban areas in schools where school heads supported inclusion and 8.2 percent in schools where school heads disapproved.

8.5 Ratings of HIV/AIDS Risks at School

In line with the previous SACMEQ projects, SACMEQ III and SACMEQ IV, teachers and school heads were asked to evaluate HIV/AIDS risks at their schools. The risks were classified into three categories, 'No/Low Risk', 'Moderate Risk' and 'High/Very High Risk'. The results are detailed in Tables 8.4(a) and 8.4(b), organized by region.

Table 8.4(a) Percentage of P6 pupils by their teachers' ratings on HIV/AIDS risks at school by Region

Region	SACMEQ III (2007)			SACMEQ IV (2013)			SEACMEQ V (2021)		
	No/Low Risk %	Moderate Risk %	High/Very high Risk %	No/Low Risk %	Moderate Risk %	High/Very high Risk %	No/Low Risk %	Moderate Risk %	High/Very high Risk %
Central	75.4	14.6	10.0	47.9	48.9	3.2	82.1	13.7	4.2
East	100.0	0.0	0.0	70.9	11.0	18.1	91.0	0.0	9.0
Island	76.0	24.0	0.0	44.8	55.2	0.0	84.8	15.2	0.0
North	98.6	1.4	0.0	82.4	7.7	9.9	77.8	22.2	0.0
South	84.8	0.0	15.2	85.6	14.4	0.0	56.0	28.8	15.2
West	100.0	0.0	0.0	31.9	26.1	41.9	100.0	0.0	0.0
Seychelles	**86.6**	**8.3**	**5.1**	**58.0**	**31.4**	**10.6**	**82.3**	**12.9**	**4.7**

Table 8.4(b) Percentage of P6 pupils by their School heads' ratings on HIV/AIDS risks at school by Region

Region	SACMEQ III (2007)			SACMEQ IV (2013)			SEACMEQ V (2021)		
	No/Low Risk %	Moderate Risk %	High/Very high Risk %	No/Low Risk %	Moderate Risk %	High/Very high Risk %	No/Low Risk %	Moderate Risk %	High/Very high Risk %
Central	100.0	0.0	0.0	58.7	0.0	41.3	100.0	0.0	0.0
East	75.8	24.2	0.0	100.0	0.0	0.0	100.0	0.0	0.0
Island	100.0	0.0	0.0	62.5	37.5	0.0	62.6	37.4	0.0
North	38.5	44.5	17.0	77.4	22.6	0.0	100.0	0.0	0.0
South	78.7	21.3	0.0	100.0	0.0	0.0	100.0	0.0	0.0
West	100.0	0.0	0.0	40.6	59.4	0.0	100.0	0.0	0.0
Seychelles	**85.2**	**12.3**	**2.4**	**70.2**	**16.3**	**13.5**	**95.0**	**5.0**	**0.0**

8.5.1 Distribution of P6 Pupils by Teachers' Ratings of HIV/AIDS Risks at School by Region

Between 2007 and 2021, teachers with fluctuating perceptions of HIV/AIDS risks taught P6 pupils. In SACMEQ III, 86.6 percent of P6 pupils were taught by teachers who rated the risk as 'No/Low Risk', 8.3 percent by teachers who rated it 'Moderate Risk' and 5.1 percent by teachers who rated it 'High/Very High Risk'. By SACMEQ IV, the percentage of P6 pupils with teachers rating 'No/Low Risk' dropped to 58.0 percent, while those with teachers rating 'Moderate Risk' rose to 31.4 percent, and 'High/Very High Risk' increased to 10.6 percent. By SEACMEQ V, perceptions improved, with 82.3 percent of P6 pupils taught by teachers rating 'No/Low Risk', 12.9 percent by teachers rating 'Moderate Risk', and 4.7 percent by teachers rating 'High/Very High Risk'.

Regionally, in 2021, teachers rating the risk as 'No/Low Risk' taught 91.0 percent of P6 pupils in the East and 100 percent in the West. The Island region showed progressive improvement, with the percentage of P6 pupils taught by low-risk-perceiving teachers increasing from 44.8 percent in 2013 to 84.8 percent in 2021. However, the South region declined sharply from 85.6 percent to 56.0 percent of P6 pupils with low-risk-perceiving teachers.

In 2021, 15.2 percent of P6 pupils in the South (15.2%), 9.0 percent in the East and 4.2 percent in the Central regions were taught by teachers who perceived 'High/Very High Risk', compared to the national mean of 4.7 percent of P6 pupils with such teachers.

8.5.2 Distribution of P6 Pupils by School Heads' Ratings of HIV/AIDS Risks at School by Region

In SACMEQ III, 85.2 percent of P6 pupils attended schools where school heads rated the risk as 'No/Low Risk', 12.3 percent in schools with 'Moderate Risk', and 2.4 percent in schools with 'High/Very High Risk'. By SACMEQ IV, the percentage of P6 pupils in schools with'No/Low Risk' ratings fell to 70.2 percent, while those in 'Moderate Risk' schools increased to 16.3 percent and 'High/Very High Risk' schools to 13.5 percent. In SEACMEQ V, 95.0 percent of P6 pupils were in schools with 'No/Low Risk' rating, 5.0 percent in 'Moderate Risk' schools, and 0.0 percent in 'High/Very High Risk' schools.

Regionally, in 2007, 100 percent of P6 pupils the Central, Island and West regions attended schools with 'No/Low Risk' ratings. By 2013, these percentages dropped to 58.7 percent in the Central and

40.6 percent in the West. In 2021, all regions except the Island region (62.6% of P6 pupils) had 100.0 percent of P6 pupils in schools with 'No/Low Risk' ratings. Furthermore, 37.4 percent of P6 pupils in the Island region attended schools with 'Moderate Risk' ratings, compared to the national average of 5.0 percent. For 'High/Very High Risk', no P6 pupils in any region were in schools with such ratings, reflecting improved confidence.

Policy Suggestions: The Ministry of Education in collaboration with the Health, Safety and Risk Management Section should:

8.1 Use HIV/AIDS campaign materials as resources for teaching and learning in the school curriculum to increase awareness and knowledge about HIV/AIDS among primary school pupils, teachers and school staff.

8.2 Incorporate HIV-AIDS education in Teacher and School Leaders Training to equip teachers and school leaders with the knowledge and skills to foster a more inclusive school environment for HIV-infected pupils.

8.3 Promote student-led and peer education programmes to foster positive peer attitudes and reduce isolation of HIV-infected pupils.

8.4 Create a monitoring and evaluation framework to track changes in attitudes towards HIV/AIDS in schools' overtime to assess the effectiveness of interventions.

8.5 Establish support systems for HIV-infected individuals to foster a well-informed, inclusive and supportive educational environment.

Conclusion

The analysis of P6 pupils' knowledge and attitudes toward HIV/AIDS in Seychelles reveals both progress and continuing challenges. While acceptance of individuals living with HIV has improved among P6 pupils, especially towards friends, a significant portion of P6 pupils continue to express uncertainty when responding to those infected with HIV. This uncertainty, present in 28.7 percent of P6 pupils nationally, signals ongoing societal stigma. The data shows clear demographic patterns, with female P6 pupils generally displaying more compassionate attitudes than P6 male pupils do, and P6 pupils from rural areas being more accepting of friends with HIV while showing greater hesitation about caregiving roles.

Regional disparities remain evident among P6 pupils, with higher rejection rates in regions like the South. While 96.1 percent of P6 pupils attend schools where school heads support the inclusion of HIV-positive teachers, and 100 percent are taught by teachers who endorse this inclusive approach, the pupil population itself shows more divided opinions. Notably, support for inclusion has declined over time among certain groups of P6 pupils, particularly those in urban areas (where opposition stands at 49.9%) and female P6 pupils (47.8% opposed).

These findings underscore the need for targeted educational and social interventions to address the 47.44 percent of P6 pupils nationally who oppose inclusion of HIV-positive peers, along with the 28.7 percent who remain uncertain. Special attention should focus on regions like the South and demographic groups with higher levels of stigma and uncertainty. Educational efforts must work to align P6 pupils' attitudes with the inclusive policies already embraced by their teachers and school heads, fostering a more supportive and inclusive response to HIV/AIDS across the Seychelles' schools.

Chapter 9: Conclusion and Agenda for Action

9.1 Introduction

This report represents the fourth comprehensive study of primary education in Seychelles under the SEACMEQ V Project, initiated in 2018. The project was successfully concluded in 2024, despite interruptions caused by the COVID-19 pandemic, which delayed the main data collection until 2021. Consistent with the framework of previous SACMEQ projects, SEACMEQ V focused on examining schooling conditions, the quality of education, and assessment outcomes in reading, mathematics and HIV/AIDS knowledge, including expanded coverage of other health topics.

Drawing on data from a national survey of primary schools in Seychelles, this analysis provides a detailed account of pupil knowledge levels, human and physical resources and school conditions. By contextualizing these findings within the local educational landscape, the study highlights both system successes and areas requiring attention for continued improvement or targeted reinforcement.

The Seychelles education system has demonstrated several noteworthy achievements. First, a stable gender balance among Primary Six pupils has been maintained across multiple SACMEQ studies, showcasing equitable access to education. Additionally, significant gains has been observed in teacher qualifications, with more educators attaining tertiary education and advanced subject knowledge in reading. Investments in classroom resources and infrastructure have yielded substantial benefits, such as full regional coverage of essential equipment and facilities like electricity, photocopiers and sports grounds.

School buildings have progressively improved, and management training for school heads has expanded, reflecting a stronger emphasis on leadership capacity. Parental involvement in pupils' education has also increased, with an increasing number of parents actively supporting homework activities. In reading, national mean scores have remained above the SEACMEQ benchmark, and certain regions recorded higher levels of teacher literacy competence.

The system continues to benefit from high rates of pupils living in stable familial arrangements, and most pupils experience relatively low rates of grade repetition and absenteeism. Furthermore,

Seychelles has achieved commendable outcomes in several education indicators, such as increased teacher competence in reading.

Despite these successes, challenges persist. The aging teaching population underscores the need for proactive recruitment strategies, particularly for male teachers and those specializing in mathematics. Disparities in teacher qualifications across regions highlight the necessity of equitable training opportunities. In-service training remains below desirable levels, and teacher subject knowledge in mathematics falls short of benchmarks, requiring intensified professional development efforts.

The overall decline in pupil performance is concerning, particularly the significant decline in girls' performance in reading which is the causal reason for the narrowing of the gender gap. Pupils from urban schools continue to outperform their rural counterparts, and private schools maintain a clear edge over public schools. The decline in pupils reaching advanced competence levels, particularly in reading, highlights the need for targeted interventions to support both foundational and advanced skills. Socioeconomic gaps, while narrowing in earlier years, have widened in SEACMEQ V, necessitating focused assistance for low-SES pupils.

Behavioural issues among pupils, such as absenteeism and lateness, remain prevalent, with regional variations in severity. Emerging challenges, including increased dropouts and drug abuse, require urgent and regionally tailored interventions. Additionally, school resources, such as teacher guides in mathematics and individual textbooks for pupils, fall short of optimal levels, impacting teaching effectiveness.

Management-related concerns include declining years of experience among school heads and insufficient community engagement in certain regions.

Overall, the findings underline a dual narrative: an education system that has made significant strides in access, infrastructure and teaching quality, yet faces pressing challenges in performance disparities, resource gaps and professional development. A sustained commitment to addressing these areas, supported by evidence-based policies and strategic resource allocation, is essential for realizing Seychelles' educational aspirations. In Chapters 3 through 8, a comprehensive set of policy suggestions was put forward with the aim of fostering dialogue and encouraging practical engagement.

9.2 Classification of Policy Suggestions

The classification of policy suggestions in this section serves as a foundation for strategic action aimed at enhancing the quality and equity of education in Seychelles. A total of 31 policy suggestions have been systematically analysed. To enhance the strategic coherence of these policy suggestions and to assist policymakers in formulating actionable and collaborative initiatives, the suggestions have been classified into five broad categories:

1. **Health, Safety and Wellbeing**

   This category emphasizes fostering a holistic, inclusive and supportive educational environment that prioritizes pupils' physical and mental health. With six policy suggestions, the focus includes providing free meals, addressing behavioural issues, integrating health education and leveraging partnerships with health organizations.

2. **Teacher Development and Professional Growth**

   This category seeks to elevate the teaching profession through targeted professional development, equitable deployment and systematic competency building. The seven policy suggestions highlight the need for continuous learning, robust monitoring and inclusive training programmes, empowering educators to enhance their instructional efficacy.

3. **Curriculum and Instructional Improvement**

   Focused on advancing teaching and learning, this category incorporates eight policy suggestions aimed at curriculum refinement, regional assessment, competency development and addressing disparities in literacy, mathematics and health knowledge. It underscores the Ministry's commitment to enhancing educational outcomes through structured and data-driven reforms.

4. **Infrastructure and Resource Enhancement**

   This category centres on improving the physical and digital infrastructure of schools to meet contemporary educational demands. With five policy suggestions, the focus lies on enhancing school safety, functionality and access to educational resources while modernizing facilities to promote equity and inclusivity.

5. Community and Stakeholder Engagement

This category emphasizes the vital role of collaboration with families, communities and external stakeholders in shaping a supportive educational ecosystem. Comprising five policy suggestions, it highlights community driven initiatives, parental engagement and strengthened partnerships to foster holistic pupil development.

Table 9.1: Summary of the Classification of Policy Suggestions

POLICY SUGGESTIONS	RELEVANT DEPARTMENTS	TIME	COST
HEALTH, SAFETY AND WELLBEING			
Policy Suggestion 3.1: Conduct a study on the pupils in schools who may not be eating breakfast to ensure the establishment and or development of programme for pupils to receive free breakfast at schools.	Learner Support and Special Needs Education Division Institutional Support Division Health, Safety and Risk Management Section	Short / Medium	Medium / High
Policy Suggestion 5.3: Develop and implement a Behavioural Support Programme with targeted interventions addressing behavioural problems.	Learner Support and Special Needs Education Division	Medium	Medium
Policy Suggestion 7.9: Strengthen partnerships with health organisations and community stakeholders to promote HIV/AIDS awareness beyond the classroom, fostering a comprehensive and supportive approach to health education.	Health, Safety and Risk Management Section Curriculum Leadership and Implementation Division CEPS / NGOs Ministry of Health	Short / Medium / Long	High
Policy Suggestion 8.3: Promote student-led and peer education programmes to foster positive peer attitudes and reduce isolation of HIV-infected pupils.	Learner Support and Special Needs Education Division Health, Safety and Risk Management Section	Short	Low

Policy Suggestion 8.4: Create a monitoring and evaluation framework to track changes in attitudes towards HIV/AIDS in schools' overtime to assess the effectiveness of interventions.	Learner Support and Special Needs Education Division Health, Safety and Risk Management Section	Medium	Low
Policy Suggestion 8.5: Establish support systems for HIV-infected individuals to foster a well-informed, inclusive and supportive educational environment.	Learner Support and Special Needs Education Division Health, Safety and Risk Management Section	Medium	Medium

TEACHER DEVELOPMENT AND PROFESSIONAL GROWTH			
Policy Suggestion 4.1: Enhance Teacher Development, Deployment, and Retention to promote and revalorize the teaching profession while ensuring equitable deployment and professional growth of teachers. 4.1.1 Strengthen the Implementation of the Teacher Management and Development Policy 4.1.2 Develop a Comprehensive Staff Deployment Guidelines 4.1.3 Strengthen Teacher Training and Professional Development 4.1.4 Establish a Continuous Professional Development Scheme	Human Resource Section Teachers' Council of Seychelles Seychelles Institute of Teacher Education (SITE)	Short / Medium	Medium / High
Policy Suggestion 4.4: The review of the Policy on Homework (2003) should include parental signing to ensure parental monitoring of homework in all schools.	Planning and Policy Development Division	Short	Low
Policy Suggestion 5.1: Establish and implement personal and professional competency standards for recruiting, deploying and retaining school heads.	Education Services Department Human Resources and Administration Division	Medium	Medium

Policy Suggestion 5.4: Implement enhanced teacher professional development and support programmes to address the teacher behavioural problems.	Institutional Support Division	Medium	Medium
Policy Suggestion 7.3: Conduct an audit to identify primary school teachers without formal mathematics qualifications and continue the in-service IGCSE Core Mathematics programme to improve teachers' foundational knowledge and ensure consistent quality across all regions.	Teachers Council Secretariat Human Resource Section	Short	Low
Policy Suggestion 7.4: Design a comprehensive continuing professional development programme focused on upskilling teachers in reading and mathematics.	The Section responsible for Teacher Development SITE Human Resource Section	Medium / Long	High
Policy Suggestion 8.2: Incorporate HIV-AIDS education in Teacher and School Leaders Training to equip teachers and school leaders with the knowledge and skills to foster a more inclusive school environment for HIV-infected pupils.	SITE Health, Safety and Risk Management Section	Medium	Medium

CURRICULUM AND INSTRUCTIONAL IMPROVEMENT			
Policy Suggestion 4.2: Assess and strengthen the monitoring system in place for effective teaching and learning practices in all schools and to maintain consistency and fairness across all regions.	The Institutional Liaison and Coordination Section Curriculum Leadership and Implementation Division School Management	Short	Low / Medium
Policy Suggestion 7.1: The Ministry of Education should place a strong emphasis on strengthening targeted support and closing gaps in pupil achievement			

7.1.1 Establish a steering committee to focus on improving pupil attainment across schools, introducing creative and evidence-based approaches that address both gender disparities and regional achievement gaps.	Pedagogical Support and Services Section Assessment Division Learner Support and Special Education Needs Division	Short / Medium	Low
Policy Suggestion 7.2: The Ministry of Education should engage in curriculum review and instructional practice enhancement 7.2.1 Commission a taskforce to evaluate the primary mathematics and reading curriculum, along with instructional practices, to develop proposals that will enhance pupils' competency levels across both subjects. 7.2.2 Integrate SEACMEQ competency levels into the Assessment Framework at Key Stages 2 and 3, allowing better assessment of pupils' mastery and informed targeted support strategies.	Assessment Division Curriculum Leadership and Implementation Division	Short / Medium	Low
Policy Suggestion 7.6: Undertake a review of the mathematics curriculum for primary schools, to ensure that the curriculum aligns with advanced skills necessary for pupils to attain higher competence levels.	The Curriculum Leadership and Implementation Division Assessment Division	Short / Medium / Long	Medium
Policy Suggestion 7.7: Conduct regular assessments and comparative analyses of school performance across regions, using the data to make informed decisions and prioritize support for schools where pupils' outcomes are below national targets.	Assessment Division Steering committee to focus on improving pupil attainment	Short / Medium / Long	Medium / High

Policy Suggestion 7.8: Integrate HIV-AIDS education into a broader, comprehensive health education curriculum, supported by continuous teacher training to enhance instructional quality and pupil understanding across all knowledge levels.	The Curriculum Leadership and Implementation Division	Short / Medium	Low
Policy Suggestion 7.10: Implement an equity-focused HIV-AIDS education reform that prioritizes inclusive resources and interventions, gender-responsive programmes and shares successful strategies from high performing schools to address disparities across different demographics.	Learner Support and Special Education Needs Division CEPS / NGOs	Short / Medium / Long	Medium / High
Policy Suggestion 8.1: Use HIV/AIDS campaign materials as resources for teaching and learning in the school curriculum to increase awareness and knowledge about HIV/AIDS among primary school pupils, teachers and school staff.	Curriculum Leadership and Implementation Division Health, Safety and Risk Management Section	Medium	Medium

INFRASTRUCTURE AND RESOURCE ENHANCEMENT			
Policy Suggestion 4.3: The Technical and Digital Technology Division should: o Intensify efforts to transform the Documentation Centre into a digital and online learning resource center. o Commit to supporting, empowering and capacitating staff to utilize and access remote and online digital resources to enhance teaching and learning and advanced instructional practices.	Technical and Digital Technology Division	Short	Low / Medium
Policy Suggestion 5.2: Implement an Infrastructure Development Plan for the Ministry of Education aimed at ensuring that all	Institutional Support Division	Long	High

school buildings meet minimum standards of safety and functionality, with a particular focus on schools with declining conditions.	Seychelles Infrastructure Agency (SIA)		
Policy Suggestion 6.1: The Ministry of Education through the Institutional Support Division should: o Strengthen the monitoring of textbook procurement to address any identified gaps and ensure all pupils have access to textbooks in a timely and equitable manner. o Develop strategies for a more technology-enabled education system, facilitating access to digital learning platforms and online educational resources. o Monitor the procurement, maintenance, and regular assessments of classroom furniture to ensure all pupils have proper sitting and writing places.	Institutional Support Division School Management	Short / Medium	Low / Medium
Policy Suggestion 6.2: Review the policy/ and or guideline on 'procedures for request of Major works at Headquarters and Educational Institutions' (June 2011) to systematically enhance the scope of financial resources available for renovation projects on schools.	Institutional Support Division	Short / Medium	Low
Policy Suggestion 6.3: The Ministry of Education should develop and implement targeted programs to strengthen its in-service training programs to: ✓ provide continuing professional development to reading teachers ✓ improve teachers' maths subject knowledge	Institutional Support Division SITE	Short / Medium	Low / Medium

✓ increase the number of teachers and school leaders receiving special training in HIV/AIDS prevention education.			

COMMUNITY AND STAKEHOLDER ENGAGEMENT			
Policy Suggestion 3.2: The Ministry of Education may need to: o Provide funding for educational materials and promote digital resources like e-books to help bridge the gap and improve overall educational outcomes. o Raise parents' awareness about the importance of reading and their engagement.	Institutional Support Division Curriculum Leadership and Implementation Division Schools	Medium / Long	Medium / High
Policy Suggestion 3.3: The Ministry of Education should: 1. Review the 2003 Homework Policy to: a. Ensure its relevance and effective implementation across schools. b. Include provisions for teachers to provide feedback on homework as part of their planning process. 2. Establish support mechanisms for monitoring and communication to ensure schools comply with the updated policy; and 3. Establish mechanisms to encourage and support parents' involvement in their children education.	Planning and Policy Development Division Schools	Short / Medium	Low
Policy Suggestion 5.5: Implement a comprehensive policy to empower school councils to actively enhance community participation in schools.	School Governing Councils Planning and Policy Development Division	Short	Low

Policy Suggestion 7.1: The Ministry of Education should place a strong emphasis on strengthening targeted support and closing gaps in pupil achievement 7.1.3 Strengthen partnerships with community organizations and local stakeholders to offer after school academic support for low-SES pupils and pupils from rural areas to improve reading and mathematics competencies.	Learner Support and Special Education Needs Division Steering committee to focus on improving pupil attainment Curriculum Leadership and Implementation Division School Management	Medium	Medium / High
Policy Suggestion 7.5: The Ministry of Education should establish a partnership between public and private schools to facilitate the exchange of best practices, teaching methodologies and resources to strengthen teaching strategies in mathematics and reading, ultimately boosting pupils' outcomes.	Curriculum Leadership and Implementation Division Private Schools State Primary Schools	Medium / Long	Low / Medium

In general, these categories reflect the multifaceted priorities of the Ministry of Education and underscore the need for integrated, collaborative efforts involving all stakeholders. This thematic organization facilitates a coherent approach to decision-making and resource allocation, enabling the Ministry to address challenges while fostering sustainable improvements in the education system.

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