

SCHOOL EDUCATION



To help the public service spend wisely

TABLE OF CONTENTS

Executive Summary	1
Key Messages	2
Glossary of Acronyms	5
Introduction	6
There is a clear legislative framework for school education	6
The education system in the Cayman Islands has a mix of public and private schools	
Student numbers increased by three per cent in the five years to 2017	10
About the audit	11
Strategic Direction	13
The Government has set broad outcomes for the education system but does not monitor of performance against them	•
An education strategy is needed to help achieve outcomes in the longer term, building on planning that is already done	
Better stakeholder engagement is needed	20
Education and economic development priorities are not clearly linked	21
Government Spending on Education	24
The Government spends around \$86 million a year on public schools	24
The rationale for private school funding is not clear	27
The link between use of resources and student performance is not clear making value for difficult to assess	_
Student Attainment and Achievement	33
Student attainment has improved in recent years but there are areas of significant underperformance	33
There is a good understanding of the key factors affecting attainment but more needs to be	e done 42
Students with Special Educational Needs (SEN)	49
The number of students with SEN in public schools has increased significantly over the five	•
There is no national strategy for SEN	50
Investment in SEN has increased significantly but it is not clear if this is improving outcome	es51

Conclusion	57
Appendix 1 – About the Audit	59
Appendix 2 – Summary information on public schools for 2018	62
Annendix 3 – Recommendations	63

EXECUTIVE SUMMARY

Education is fundamental in shaping a child's adult life. A good education is associated not only with higher income but also with better health and longer life expectancy. The social and economic costs of poor education are high and take many different forms, including increased criminality, lower rates of economic growth, higher unemployment, and lower participation in civic and political activities.¹

Achieving "the best education opportunities for all our children" is one of the eight strategic outcomes of the Cayman Islands Government (the Government). This is underpinned by a number of actions, including:

- Investing in programmes that support improved attainment in academic disciplines at all levels, with a key focus on literacy, numeracy and science.
- Developing and implementing a new approach to technical and vocational education and training.
- Enhancing opportunities for young people with special needs.³

Achieving this strategic outcome will also contribute to the success of the Government's other strategic outcomes, including achieving full employment and a strong economy to help families and businesses.

The Ministry of Education, Youth, Sports, Agriculture and Lands (MEYSAL) is responsible for school education. Spending on education was \$86 million in 2018 - the largest percentage of total Government operating expenditure, at 12.7 per cent. Education also accounts for significant levels of overall capital expenditure and it is projected to continue doing so as the Government upgrades school facilities.

Although there have been school inspections in the Cayman Islands, the performance of the education system has never been audited before. The significant levels of government expenditure on this area and the importance of the sector meant it was appropriate to examine how well the education system is performing.

The objective of this audit was to determine how efficiently and effectively MEYSAL is using its resources to maximise student achievement. We aimed to answer the following audit questions:

• Does the Government have a clear strategic direction for improving the performance of the school education system?

¹ Overcoming School Failure: Policies that work, Organization for Economic Co-operation and Development, April 2010.

² 2018 Strategic Policy Statement, Cayman Islands Government, August 2017.

³ Ibid

⁴ Operating expenditure targets by agency, 2018 Strategic Policy Statement, Cayman Islands Government, August 2017.

- How efficiently and effectively is MEYSAL using its resources to maximise student achievement?
- How efficiently and effectively is MEYSAL improving student achievement?

Our audit covered MEYSAL and the Department of Education Services (DES), focusing on public schools. ⁵ It also looked at the role of key stakeholders, such as the Education Council. The private school sector is included in the audit scope in relation to government funding for the sector and Year 12 scholarship funding only. The audit did not cover the role of the Office of Education Standards, the early year's sector, the appropriateness of the national curriculum or progress in improving the school estate. The report uses data published as at August 2019 and covers the five-year period from 2014 – 2018. However, in some instances where data for 2018 were not published at August 2019, we used the five-year period from 2013 to 2017.

KEY MESSAGES

The Government has identified education as a priority, and in its Strategic Policy Statements it sets out a strategic broad outcome for education "the best education opportunities for all our children". As part of the budgeting process, the Government specifies the outputs to be purchased from MEYSAL in both quantitative and qualitative terms. However, these are mostly inputs or outputs, such as the number of schools, number of students, number of curriculum subjects taught, and number of tests administered. MEYSAL does not monitor or report progress in achieving the broad outcome and outputs. There is no long-term strategic plan for education that sets out the goals, objectives and success measures, including outcomes to achieve the overarching strategic broad outcome. A long-term approach is needed for education, as it can take a number of years for changes in policy and activity to have an impact.

MEYSAL performs some medium- to long-term planning that could be used to inform a long-term strategic plan for education. This includes projection planning of student numbers, which are used to inform schools estate and capital investment planning. However, MEYSAL does not do any long-term financial or workforce planning; both of which are essential elements of strategic planning. In 2017, DES developed a Capital Projects Master Plan that sets out an assessment of the state of each school, and any improvements needed. The plan indicates that the school estate is not fit-for-purpose and a lot of new buildings and major refurbishments are needed in the medium-term and aligns with budgets, but these are short term.

MEYSAL and DES engage extensively with staff in public schools, holding a range of regular meetings to ensure systematic communication, share good practices and identify and mitigate potential problems.

⁵ Public schools are those run by and funded by the Cayman Islands Government's

However, there is no overall strategy for parental engagement. We found that a recent policy was developed and implemented without sufficient parental engagement or consultation with teachers.

The Government also has a strategic priority to ensure full employment for Caymanians. However, we found that there is no clear link between the vision and priorities for education and the Government's economic priorities. The Government has highlighted the importance of vocational trades in the Cayman Islands and the importance of encouraging young Caymanians to take up these trades, but there is no national strategy for technical and vocational education and training (TVET). There is no clear link between scholarship funding awarded and economic priorities as data on the type of industry for locally funded scholarships are not tracked.

The Government spent \$85.6 million on public school education in the year ended 31 December 2018; an increase of 17 per cent since 2014. The increase in expenditure is mainly due to increases in payroll (salaries, wages, pension and healthcare), maintenance of school buildings and student transportation costs. However, there needs to be a better understanding of the link between use of resources and performance. Information is collected and reported on some performance measures. For example, targets are set for Student-Teacher Ratios (STR) in public schools although this is not an indicator of better education outcomes. Between 2013 and 2017, the STRs were less than the targets; the STRs were also lower than regional and most international comparators. However, neither MEYSAL nor DES collects or monitors other performance measures - for example, cost per student, a good efficiency measure. Our analysis shows variations in the cost per student across the public schools. We also compared the average cost per student in the Cayman Islands public schools with the average cost per student in private schools in the Cayman Islands and other countries. This comparison showed that the average cost per student in public schools is 66 per cent higher than the average cost per student in private schools; and was the second-highest cost per student in 2015 when compared to 33 OECD countries.

The Government provided around \$1.5 million a year to the 11 private schools in the Cayman Islands between 2012-2013 and 2016-2017 (reduced to \$1.0 million in 2018). Some students attending private schools to complete Year 12 may also receive scholarships. However, there is no clearly documented rationale for this funding, setting out its purpose or what it is expected to achieve.

Overall, student attainment has improved over the five years from 2014 to 2018, although performance has fluctuated within this period. Significant levels of under-performance remain across all subjects and analysis of attainment data at both primary and secondary school levels shows underperformance against expectations, gaps in attainment across public schools and significant performance gaps between genders. These gaps have remained fairly consistent over the five years. In 2010, the Government restructured secondary education in the Cayman Islands and introduced a mandatory

⁶ 2015 is the latest information available for comparative purposes.

Year 12. Our analysis of data shows that the performance of students in the same cohort significantly improves between Year 11 and Year 12 for those students re-sitting exams; this has been consistent across the five years 2014 to 2018.⁷

MEYSAL collates and publicly reports a range of useful data, including attainment levels, in its annual Education Data Report. However, the reports do not include comparisons of attainment performance against other countries and are not always published on a timely basis. For purposes of our audit, we compared publicly available data on 2018 examination results for Key Stages 2 and 4 in the Cayman Islands and England. This comparison shows that students in English public schools performed better at both primary and secondary school levels.

There are a number of factors that influence levels of student attainment, and some of these are reflected in the Government's Strategic Policy Statements (SPS). For example, improving TVET may help develop student motivation and engagement, and better training of teachers in relation to special educational needs (SEN) supports teacher quality. However, the SPSs do not fully reflect all of the factors and they cover only the three years ahead, yet most of the factors require medium- to long-term solutions. We found that MEYSAL and DES have focused on improving some of these factors. For example, DES and schools have been focusing on using data more effectively to drive improvements in student performance. The increased use of data over the past few years has provided a better understanding of the impact that certain initiatives and programmes such as reading recovery have on student performance. However, there is scope to further develop the use of data. As part of its inspection process, the Office of Education Standards (OES) surveys students to assess their level of engagement. Based on the 2018 surveys, most primary and secondary school students feel that they are engaged in the education system. However, truancy rates are high and have increased over the past five years, which may indicate that a significant minority of students are disengaged from the education system. Truancy rates vary significantly by school, and there are opportunities for peer learning and sharing of strategies that work in reducing truancy levels.

Between 2013 and 2017, the number of students with SEN in public schools increased by 19 per cent, to 593. The Government has identified SEN as a priority area for education; as a result, from 2014 to 2018 there was a 49 per cent increase in funding, to \$4 million and a significant increase in staff to support students with SEN. However, there is no national strategy for SEN and it is not clear if this increase in funding is improving outcomes for students with SEN. Over the five years to 2018, the attainment of primary school students with SEN declined significantly in all subjects except Writing. However, the attainment of Year 12 students with SEN has improved over the same period. It is important that the Government develop a strategy for SEN that provides a clearer evidence base for the level and type of its investment in SEN and a clearer picture of how it expects educational performance to improve.

⁷ Year 12 is usually for students starting A-level examinations but some students use this to re-sit failed exams in Year 11.

GLOSSARY OF ACRONYMS

A-Levels Advanced Level qualification

ASDAN (CoPE) Award Scheme Development and Accreditation Network

BTEC Business and Technology Educational Council
CAPE Caribbean Advanced Proficiency Examination

CAT4 Cognitive Abilities Tests

CCSLC Caribbean Certificate of Secondary Level Competence

CIFEC Cayman Islands Further Education Centre

CIG Cayman Islands Government

CINQF Cayman Islands' National Qualification Framework

COEA Certificate of Educational Achievement
CSEC Caribbean Secondary Education Certificate

CXC Caribbean Examinations Council

DES Department of Education Services

DIBELS Dynamic Indicators of Basic Early Literacy Skills

ESO Economics and Statistics Office

GCSE General Certificate of Secondary Education

GED General Educational Development

GPA Grade Point Average

HS High School

IB International Baccalaureate

ICT Information and Communications Technology

IGCSE International General Certificate of Secondary Education

IMI Institute of the Motor IndustryIT Information TechnologyKPIs Key Performance Indicators

MEYSAL Ministry of Education, Youth, Sports, Agriculture and Lands

OAG Office of the Auditor General Cayman Islands

OECD Organization for Economic Co-operation and Development

OES Office of Education Standards

PoA Plan of Action

PSA Private Schools Association
SEN Special Education Needs
SPS Strategic Policy Statement

SSIO Senior School Improvement Officer

STR Student-Teacher Ratio

TVET Technical and Vocational Education and Training

UCCI University College of the Cayman Islands

INTRODUCTION

THERE IS A CLEAR LEGISLATIVE FRAMEWORK FOR SCHOOL EDUCATION

- 1. The *Education Law (2016)* (the Law), states that education in the Cayman Islands is a basic right of children and is compulsory between the ages of 4 and 17. The Law specifies a range of individuals and organisations that have a role to play in the education system.
- 2. The Minister of Education is responsible for determining national policy and the strategic direction for education and promoting the effective implementation of the policy; and for establishing a varied, relevant and comprehensive educational system.
- 3. The Ministry of Education, Youth, Sports, Agriculture and Lands (MEYSAL) is responsible for education. The Chief Officer of the Ministry of Education, under the specific or general direction of the Minister of Education, is responsible for roles that include monitoring and assessing the quality, economy, efficiency and effectiveness of the education system and publishing information. The Ministry of Education is structured into five main areas: early childhood care and education; curriculum; education strategy; inclusions (special educational needs and behaviour); and information and communications technology (ICT).
- 4. The Department of Education Services (DES) is responsible for public school education. The DES is headed by a Director whose duties include developing principles and procedures for implementing national policies in public schools; developing and directing training, including induction, of all professional staff; and submitting reports on matters relating to performance management of teachers. The DES is structured into five main areas, covering business services, data and records, facilities, registration, and school improvement.
- 5. The Education Council is a 15-member body made up of a mix of private individuals and public servants. The Minister delegates some matters to the Council, and it advises the Minister on education matters. It also registers educational institutions, institutions providing educational support services, and teachers in schools and early childhood and education centres, and regulates the teaching professions. MEYSAL has recently implemented, or is in the process of implementing, a number of recommendations from the Education Council. These include an increase in the minimum pay for teachers, a new curriculum, introduction of school boards, means testing for government scholarships and a new dress code for public school students.

- 6. The Office of Education Standards (OES) is responsible for independently assessing and monitoring all educational institutions (whether public or private) against criteria for education standards and publicly reporting the results. ⁸ The assessment criteria are approved by the Minister after consultations with the Education Council, and each educational institution is expected to be assessed and reported on at least once in every four years. The Minister has requested that OES carry out assessments at least once every two years and may also request that OES carry out additional assessments. In October 2017, the OES was transferred from MEYSAL to the Portfolio of the Civil Service (POCS) to further enhance its independence from MEYSAL. At 31 December 2018, OES had three employees; it also employs Associate Inspectors from overseas to help carry out inspections. The OES is currently in the middle of an inspection plan covering all schools in the Cayman Islands from September 2018 to June 2019 and from September 2019 to June 2010. Inspection reports are published on the CIG website at http://www.gov.ky/portal/page/portal/esahome/publications. We relied on data collected by the OES in the course of our audit.
- 7. In addition to the Law, the Education Regulations, 2017 and a series of MEYSAL policies provide further guidance on a range of areas such as child abuse and neglect reporting, safe environment, staff safeguarding, professional development, curriculum, donations, graduation, ICT integration, and discipline and student behaviour.

THE EDUCATION SYSTEM IN THE CAYMAN ISLANDS HAS A MIX OF PUBLIC AND PRIVATE SCHOOLS

8. The Cayman Islands have both public and private schools. The Government funds and operates the public schools, which cover all three islands and all districts. Within the public school system there are eleven primary schools, three secondary schools, one special educational needs (SEN) school, and the Cayman Islands Further Education Centre, which provides an opportunity for students to resit Mathematics and English examinations and take other external examinations. There are 17 private schools, all of which are located on Grand Cayman.

7 |

⁸ According to *The Education Law, 2016*, "educational institution" means (a) a school; or (b) an institution that provides part-time or full-time early childhood care and education; compulsory education; post-compulsory education and training; technical and vocational education and training; education to prepare for the award of any degree, qualification or certification; or education provision for persons with special education needs and disabilities.

PUBLIC SCHOOLS OFFER EDUCATION TO YEAR 11 ONLY BUT ALL STUDENTS ARE EXPECTED TO COMPLETE YEAR 12

- 9. The curriculum for every school must include the following mandatory subjects: literacy, numeracy, science, information and communication technology, the arts, physical education, and studies related to civics, religion, and the history and culture of the Islands. The public school curriculum is currently a blend of the English and Caribbean curriculums, but this is changing. DES is planning to implement a new primary school curriculum from September 2019 and a new secondary school curriculum from September 2021. 10
- 10. The public education system is made up of primary and secondary levels divided by year groups and key stages (Exhibit 1). 11 Key Stages 1 and 2 are offered at primary school, and Key Stages 3 and 4 at secondary school.

Exhibit 1 – The key stages of the education system, by type of provision, year and age 12

EARLY YEARS PROVISION	PRIMARY PROVISION				,	SECONDARY	PROVISIO	N				
		KEY STAGE 1			KEY STAGE 2			KEY STAGE 3			KEY STAGE 4	
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17

Source: The Education Data Report, 2017, Ministry of Education, Youth, Sports, Agriculture and Lands.

11. Generally, qualifications are defined in terms of difficulty level, that is, the higher the level, the more difficult the qualification. For example, the Cayman Islands National Qualification Framework ("CINQF") states that students at Key Stage 4 are expected to take and pass subjects at Level 2 (expected level at the end of secondary education). Exhibit 2 summarises the CINQF.

⁹ Education Law, 2016

¹⁰ 2020 Strategic Policy Statement

¹¹ The Education Data Report, Ministry of Education, Youth, Sports, Agriculture and Lands, 2016

¹² From September 2019, Year 3 is included within Key Stage 2

Exhibit 2 - The Cayman Islands National Qualification Framework

NQF	SAMPLE QUALIFICATIONS	EDUCATIONAL STAGE
LEVEL 5	Postgraduate Degree	Tertiary or Advanced Professional Qualifications
LEVEL 4	Bachelor's Degree or equivalent	Tertiary
LEVEL 3	- A-Levels - Associate Degree - IB Diploma - CAPE - BTEC Level 3 (Nationals) - Advanced Placement - Trinity Music Grade 8	Key Stage 5 Usually enables entry to the Bachelor's Degree (may also offer advanced standing)
LEVEL 2	- Cayman Islands Level 2 High School Diploma (Standard & Honours) - CSEC (Grades I-III) - GCSE/IGCSE (Grades A*-C) - GED - BTEC Level 2 (First Diplomas) - IMI Level 2 - Trinity Music Grade 5 - ASDAN (COPE)	Years 10/11/12 (Key Stage 4 - Standard High School) National Curriculum Level 7-8
LEVEL 1	- Cayman Islands Level 1 High School Diploma - CSEC (Grades IV-VI) - GCSE/IGCSE (Grades D-G) - CCSLC (Grades C&M) - BTEC Level 1 (Introductory) - IMI Level 1	Years 7/8/9 (Key Stage 3 - Middle School) National Curriculum Level 5-6
ENTRY LEVEL	- Entry Level Certificates - ASDAN Bronze Award - CoEA	Years 4/5/6 (Key Stage 2 - Upper Primary) National Curriculum Level 3-4

Source: The Education Data Report for the 2017-18 academic year, Ministry of Education, Youth, Sports, Agriculture and Lands.

- 12. Public schools are mainly for Caymanian students but places may be given to other students based on priority and if they are available. Admissions to public schools are based on the following priorities:¹³
 - Reception classes: (1) Caymanians, with proof established by birth certificate, passport or status certificate; (2) non-Caymanians with proof established by birth or marriage to a Caymanian parent residing on island.
 - Primary and Secondary: (1) Caymanians; (2) dependents of Caymanians; (3) dependents of contracted government employees; (4) dependents of permanent residents.

¹³ Cayman Islands Government Primary and Secondary School Street Boundaries, Department of Education Services.

- 13. Currently two of the three public secondary schools end at Year 11, when most students are aged 16. However, under the *Education Law*, education is compulsory until age 17. Students are therefore required to continue their education, based on academic criteria, in one of the following three ways:
 - Attend Cayman Islands Further Education Centre (CIFEC) in Grand Cayman or Layman E. Scott Sr. High School in Cayman Brac for Year 12.
 - Undertake their A-Levels at a private school in Grand Cayman or any other suitably recognised institution.
 - Undertake an Associate Degree programme at the University College of the Cayman Islands or other suitably recognised institution.¹⁴

PRIVATE SCHOOLS' CURRICULUMS ARE BASED ON ENGLISH OR AMERICAN EDUCATION SYSTEMS

- 14. Of the 17 private schools, nine offer both primary and secondary education, and eight offer primary education only. Unlike public schools, private schools can base their curriculum on either the English or American education systems.
- 15. If a school chooses to follow the English curriculum, students are similarly divided into year groups and different key stages. As with the public school system, students take external examinations at the end of Key Stage 4 but sit examinations only from Cambridge International and Welsh examination boards.
- 16. Schools that follow the American curriculum offer international baccalaureate programs and advanced placements. Most students who attend these schools will graduate with an American high school diploma. At the end of Year 12, students at these schools can sit their SAT examinations. ¹⁵

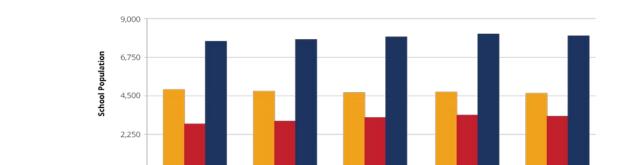
STUDENT NUMBERS INCREASED BY THREE PER CENT IN THE FIVE YEARS TO 2017

17. As at September 2017, there were 7,977 students in the Cayman Islands, of which 4,656 were in public schools and 3,321 in private schools (Exhibit 3). The total school population had increased by 3 per cent, from 7,722 in September 2013 as a result of a 15 per cent increase in the private school population and a 4 per cent decrease in the public school population.¹⁶

¹⁴ The Education Data Report, Ministry of Education, Youth, Sports, Agriculture and Lands, 2016

¹⁵ SAT examinations are standardised tests for college admissions in the United States.

¹⁶ 2017 Compendium of Statistics, Economic and Statistics Office, Cayman Islands Government, November 2018.



4,739

3,067

7,806

Exhibit 3 - Public and private school student numbers, 2013 to 2017

4,836

2,886

7,722

Source: 2017 Compendium of Statistics, Economic and Statistics Office, Government of the Cayman Islands (the "Government"), November 2018.

4,708

3,213

7,921

4,699

3,379

8,078

4,656

3,321

7,977

18. There is a correlation between the growth in private school students and changes in the general population. Over the same period, the general population in the Cayman Islands increased by ten per cent, with a nine per cent increase in Caymanians and a twenty per cent increase in non-Caymanians. The fact that public schools are not open to children of non-Caymanians employed in the private sector contributed to the 15 per cent increase in the private school population.

ABOUT THE AUDIT

Public Schools

Private Schools

Total

- 19. We carried out this audit because education accounts for the largest percentage of government operating expenditure, \$86 million or 12.7 per cent of total forecast expenditure in 2018.¹⁷ Education also accounts for significant levels of overall capital expenditure, and is projected to continue doing so as the Government upgrades public school facilities.¹⁸ Over the five years to 2018, overall student attainment improved but performance has fluctuated and student performance remains below expected standards and comparative international levels.
- 20. The objective of the audit was to determine how efficiently and effectively MEYSAL is using its resources to maximise student achievement. We aimed to answer the following questions:

¹⁷ 2018 Strategic Policy Statement, Cayman Islands Government

¹⁸ Based on the Budget Statements for 2018, capital expenditure of education was budgeted at \$12.3 million, or 12.2 per cent of the \$101.2 million budgeted capital expenditure for the Core Government.

- Does the Government have a clear strategic direction for improving the performance of the school education system?
- How efficiently and effectively is MEYSAL using its resources to maximise student achievement?
- How efficiently and effectively is MEYSAL improving student achievement?
- 21. The report is structured into four sections:
 - Strategic direction.
 - Government spending on education.
 - Student attainment and achievement.
 - Students with special educational needs.
- 22. The audit focuses on the public school system, covering MEYSAL, DES and all public schools. Our analysis includes all public funding for the education system, which covers public schools, Government funding to private schools and Year 12 scholarship funding. The audit did not cover the following:
 - Office of Education Standards (OES) inspections of education institutions (although we have used some OES data in our analysis);
 - the early years sector;
 - the appropriateness of the national curriculum; and
 - the school estate.
- 23. The audit drew on a range of evidence to inform our findings and conclusion, including:
 - Holding interviews and focus groups with key stakeholders, including MEYSAL, DES, school staff, students and parents.
 - Reviewing documents such as legislation, key strategies and plans, performance management documents, funding, monitoring and reporting arrangements.
 - Examining international literature on high performing education systems, including key factors influencing attainment, levels of student attainment, and funding for education.
 - Analysing a range of data, including expenditure on education and SEN, staffing levels, and student attainment. We used most recent data from MEYSAL, DES, and OES for 2018; and from ESO for 2017.
- 24. Appendix 1 provides more information about the audit, including the audit criteria, approach and methodology. Appendix 2 provides a summary of information on all public schools for 2018, including location, number of students, expenditure, student teacher ratio, costs per student, truancy rates and attainment. Appendix 3 provides a summary of the recommendations we have made for improvement as a result of the audit, and management's response to these recommendations.

STRATEGIC DIRECTION

25. This section of the report considers whether the Government provides clear direction for education and has a strategic plan for improving the performance of the school education that is linked to the Government's education and economic development priorities. It also looks at the public monitoring and reporting arrangements for the broad outcomes and targets set for school education.

THE GOVERNMENT HAS SET BROAD OUTCOMES FOR THE EDUCATION SYSTEM BUT DOES NOT MONITOR OR REPORT PERFORMANCE AGAINST THEM

THE GOVERNMENT HAS SET BROAD OUTCOMES FOR THE EDUCATION SYSTEM

- 26. The Strategic Policy Statement (SPS) sets out the Government's fiscal plans and priorities for each budget period. ¹⁹ We reviewed each SPS from 2013 to 2018, noting that they all include education as a priority area and set broad and specific outcomes. For example, the 2018 SPS (for 2018 and 2019 financial years) includes "The best education opportunities for all our children" as a broad outcome. The same SPS sets the following specific actions for the education system:
 - Complete the new John Gray High School and create a positive learning environment.
 - Extend the use of information and communications technology in schools.
 - Improve and expand primary school facilities to ensure that children have the best possible start to their education.
 - Extend the delegation of responsibility to schools and improve the accountability of Principals for the standards achieved.
 - Develop and implement a new approach to technical and vocational education and training (TVET)
 that maximises the opportunities for all students to develop the skills needed for future
 employment.
 - Invest in programmes that support improved attainment in academic disciplines at all levels, with a key focus on literacy, numeracy and science.
 - Enhance opportunities for young people with special needs through better training of teachers and improvements in facilities.
- 27. Our review of recent speeches by the Premier of the Cayman Islands and the Minister of Education noted that they are consistent with the priorities set in the SPSs, providing a clear and consistent

¹⁹ The SPS budgeting process changed from an annual budget to a biennial budget with effect from 2018. SPSs have a financial outlook of three years.

- direction for the education service. We also observed that SPSs and recent speeches by the Premier highlighted the importance of technical and vocational education and training (TVET) in ensuring that Caymanians benefit from the country's economic growth.
- 28. Each school, in collaboration with MEYSAL and DES, develops a Plan of Action (PoA) to support the delivery of the SPS. The schools develop their PoAs based on a template provided by DES, which sets out the priority areas that must be covered. In 2018-19, the PoA priority areas included: literacy, numeracy, data systems, science, special educational needs (SEN) and/or disabilities, and TVET. These priority areas are consistent with the six areas identified in the 2018 and 2019 SPS. From our review of a sample of PoAs, we found that the PoAs are aligned to the Strategic Policy Statements. However, as noted in the OES' 2018 annual report, the PoAs at primary school level are not sufficiently adapted to address the individual performance needs of each primary school.

THERE IS NO MONITORING OR PUBLIC REPORTING AGAINST THE BROAD OUTCOMES SET

- 29. Section 5 (4) of the Law requires that the Minister of Education prepares an annual report on the education service. This report should include information on the standards of achievement and progress of students in public schools; the work of the Ministry during the preceding twelve-month period; and measures to be taken and targets achieved in the implementation of any national strategy in the next twelve-month period. The Law also requires that this report be tabled in the Legislative Assembly within twelve months following the end of the academic year to which it relates, and be published as soon as reasonably practicable thereafter.
- 30. In its annual Education Data Report, MEYSAL collates and publicly reports enrolment data for both public and private schools. The report also includes combined students' attendance and attainment data for all public schools but this information is not reported by school. The report also covers performance against cognitive abilities test (CAT4) predictors.
- 31. The academic year runs from August of one year to June of the next, which means annual reports should be published by the following June. We found that the reports were not published on time. For example, the report for the 2016-17 academic year was published in November 2018, five months later than it should have been. However, we note that the latest 2017-18 Education Data Report was published in April 2019, which is within the deadline specified in the Law and a significant improvement over the previous report. There is scope for further improvement, as exam results are available in October of the same year that students sit the exams. Our review found that

- some other countries published their educational attainment results between December and February. ²⁰
- 32. Although MEYSAL and DES publish some performance information in relation to education, as outlined above, they do not monitor or publicly report progress against the broad outcomes that are set out in the SPSs. This lack of public reporting reduces the opportunity for scrutiny or challenge of the progress for the year against set targets.

Recommendation 1: The Ministry of Education should monitor and publicly report, at least annually, progress against the broad outcomes and priorities set out in the Strategic Policy Statements.

Recommendation 2: The Ministry of Education should publish the Education Data Report on a timely basis, ideally by December of the same year of sitting exams.

AN EDUCATION STRATEGY IS NEEDED TO HELP ACHIEVE OUTCOMES IN THE LONGER TERM, BUILDING ON THE PLANNING THAT IS ALREADY DONE

- 33. Following the 2009 election, the Government prepared an Education Health Check Report and used it to develop an Education Stabilisation Plan (January 2011). This plan was intended to respond to the many pressing needs and challenges and to create a sense of stability and a foundation for further work. In November 2012, MEYSAL published the 2012-2017 Cayman Islands Strategic Plan for Education (the Strategy), which incorporated achievements from the Education Stabilisation Plan and mapped the plan to the Strategy. However, the Strategy expired at the end of December 2017, and no further strategic plans have been prepared since then.
- 34. Strategic plans are important for clearly articulating the visions, goals, objectives and priorities of an organisation or policy area. They should also include clear success measures, including outcomes, and should set baselines against which to measure performance.
- 35. Medium— to long-term planning helps ensure that resources are employed in the right place at the right time to deliver an organisation's medium— to long-term strategic plans. There should be a clear link between the strategic objectives and priorities and other long-term plans and strategies for finances, workforce, estates, capital investment and IT. Although there is no strategic plan for education we reviewed and assessed the extent of short-, medium- and long-term planning that MEYSAL and DES were doing.

²⁰ We reviewed published data in England, Scotland and Wales.

Recommendation 3: The Ministry of Education should develop a new medium- to long-term education strategy. The Ministry should regularly assess and publicly report progress against the strategy.

PROJECTIONS OF STUDENT NUMBERS ARE CARRIED OUT AND COULD BE USED TO BETTER INFORM OTHER LONG-TERM PLANNING

36. MEYSAL performs medium- to long-term projection planning of student numbers. The latest projections cover 2018 to 2025 for primary schools and 2018 to 2022 for secondary schools. Exhibit 4 shows the information that is taken into account when preparing these projections. From our review we were able to confirm that the projection planning is based on reasonable assumptions.

Exhibit 4 – Data used to inform student population projections

	Primary Schools	Secondary Schools
Current and past enrolment i.e. trend analysis of current & past average class sizes to project future enrolment	Data includes current enrolment in pri	mary schools for Years 1 to 6.
Live births data from the government hospital in the Cayman Islands (Health Services Authority)	The data is used to compute the ratio of number of live births and Year 1 entries 5 years later. The ratio is a reasonable indicator as it has fluctuated between 0.50 and 0.52 from 2009 to 2012.	X
Population growth data from the Cayman Islands' Economics and Statistics Office (ESO)	Projected growth rate in the number of s population growth data from ESO. From th not expected to have a major impact on stu most of the population growth is attri non-Cayman	e projections, population growth Ident numbers in public schools buted to inward migration of

Source: OAG analysis of data provided by DES

37. Our review of student number projections found that they were being used to inform schools estate and capital investment planning. For example, one of the conclusions in the student number projection plan is that the size of the public school estate is sufficient to meet the projected number of students but that there may be a need to change catchment areas and redistribute students among the current schools.

- 38. However, we found that for private schools, student projection planning is not performed. As a result, MEYSAL may not be able to identify:
 - shortages in places for students who are unable to access the public school system;
 - spaces available in private schools for Year 12, as this is not provided by any of the public schools in Grand Cayman; and
 - capacity available in public schools for proposed initiatives such as the proposal by the Education Council to integrate public and private schools.
- 39. We also noted that student number projections were not used to inform any other medium- to long-term planning such as the teaching workforce.

Recommendation 4: The Ministry of Education should include private school student numbers in its student projection planning. The projection planning should be used inform other medium- to long-term plans.

THERE IS NO LONG-TERM WORKFORCE PLAN FOR EDUCATION

40. As at 31 December 2018, MEYSAL employed 68 staff and DES employed a further 799 staff. Exhibit 5 shows that of the total DES staff, 527 were educationalists (including teachers and some centrally-based specialist staff) and 272 were education support and administrative employees. ²¹ Of the total 799 staff employed by DES, 761 were based in schools.

Exhibit 5 – Department of Education Services employees, by type, 2014 to 2018

	JUN 14	JUN 15	JUN 16	JUN 17	DEC 17	DEC 18	% CHANGE 2014 - 2018
Educationalists	471	479	479	486	501	527	12%
Other education support & administrative employees	244	233	241	268	272	272	11%
Total Department Employees	715	712	720	754	773	799	12%

Source: OAG analysis of MEYSAL headcount report (IRIS: Employee Listing)

²¹ Educationalists include teachers and centrally-based specialist staff such as literacy and numeracy coaches, school inclusion specialists, truancy officers and learning mentors etc.

41. Further analysis of DES staffing shows that as at 31 December 2018, 37 per cent of DES employees were 50 years or older (Exhibit 6). In our April 2018 report *Workforce planning and management in the Cayman Islands Government*, we stated that the age profile of the civil service workforce highlighted the need for workforce planning, as staff aged 55 and older would be retiring within the next decade. ²² This creates risks of losing significant skills and expertise and corporate knowledge.

Exhibit 6 - DES employees by status and age at 31 December 2018

	CAYMANIAN		NON-CAYMANIAN		TOTAL		
	No. of Employees	% of Total Employees	No. of Employees	% of Total Employees	Total Employees	% of Total Employees	
Staff aged under 29	51	6%	24	3%	75	9%	
Staff aged 30-49	138	17%	294	37%	432	54%	
Staff aged 50+	209	27%	83	10%	292	37%	
Total	398	50%	401	50%	799	100%	

Source: OAG analysis of MEYSAL headcount report (IRIS: Employee Listing)

- 42. In our April 2018 report we also found that the Government did not have a workforce plan or an overarching approach for workforce planning; roles and responsibilities for work force planning were not clear; and better information was needed to improve succession planning. We recommended that the Government and its larger departments prepare long-term workforce plans. The Government committed to implement this recommendation between 2020 and 2022. MEYSAL and DES are the largest ministry and department respectively within core government in terms of the number of staff employed. It is important that the workforce be carefully planned and managed. We therefore encourage MEYSAL and DES to be early implementers of this recommendation. Our 2018 report also identified a number of areas where the Cayman Islands Government needed to improve its approach to workforce management, including succession planning, learning and development and performance management.
- 43. Succession planning involves identifying and developing potential future leaders or senior managers and people for business-critical roles in the short-, medium- and long-terms. This is a good practice that helps ensure a smooth transition and limited downtime when key people leave critical

²² Workforce Planning and Management in the Cayman Islands Government, Office of the Auditor General, April 2018

positions. DES has a succession plan for identifying and developing Caymanian employees. The plan, implemented in the 2016-17 academic year, was aimed at primary school management and subsequently expanded to secondary schools; it includes pathways from entry level to leadership positions. However, there are some challenges in implementing succession plans. For example, opportunities for acting in positions at a higher level will only happen in certain circumstance such as covering maternity leave as all teachers are on holiday at the same time, or there is a change in the senior leadership team.

44. As previously reported, each school has a Plan of Action (PoA) that demonstrates how it contributes to the strategic direction set out in the SPS. School Principals are expected to be held to account for their PoA, and the PoA goals should inform the goals and objectives in the annual performance review for each teacher. As noted in Workforce Planning and Management in the Cayman Islands Government, most staff have annual performance assessments, but the way their performance is assessed needs to improve. 23 The Government should introduce measures to improve the quality of staff performance management.

THERE IS EFFECTIVE FINANCIAL MANAGEMENT AND REPORTING BUT NO LONG-TERM FINANCIAL **PLANNING**

- 45. Funding is allocated to schools using the "Equity Funding Model", which is based on each school's historical spending levels and enrolment figures. However, as DES centrally procures major items on behalf of all public schools, such as school buses, security, janitorial and gardening services, ITrelated services and stationery, schools have direct control of only a small proportion of their budget to fund some extra-curricular activities and supplies. We commented on DES' role in centrally procuring some of these services in our report Government's use of Outsourced Services. 24
- 46. MEYSAL manages its finances at two levels the Ministry level and by school as follows:
 - Monthly financial reports are prepared for the Ministry as a whole showing actual expenditure compared to budget. The reports are reviewed by the Minister and the Chief Officer of MEYSAL. Instances where actual expenditure is greater than budget are investigated.

19 |

²³ Paragraph 60 of Workforce Planning and Management in the Cayman Island Government outlines the following areas for improvement in the performance management process: having more regular performance discussions; equipping managers with the skills needed to have difficult conversations; building calibration or moderation of scores by senior management into the process; and using information to identify areas for staff development and to identify employees who have potential to grow and develop in to future leaders.

24 Government's use of Outsourced Services, Office of the Auditor General, June 2019

- Monthly reports are prepared for each school that show the year-to-date budget, actual
 expenditure and the remaining budget. These reports are sent to school Principals to help them
 monitor and manage their schools' expenditure.
- 47. As previously reported, the Government's SPSs are short-term, for three years only. However, a longer-term approach to financial planning for education is needed. This would ensure that resources are appropriately targeted at priorities and demonstrate that investments are properly planned and budgeted for.
- 48. In 2017, DES developed a Capital Projects Master Plan that sets out an assessment of the state of each school and any improvements needed. This is an important element of long-term planning and it is encouraging to see that the Department is considering what it needs to maintain a fit-for-purpose school estate. Within the Capital Projects Master Plan, required capital developments are rated in order of priority as "High", "Medium" or "Low". We compared the priority ratings in the plan with the budgeted capital works reflected in the 2018 and 2020 SPSs and the Ministry's Budget Statements for the 2018 and 2019 financial years noting that there is evidence that the plan is aligned with planned capital projects and budget.

Recommendation 5: The Ministry of Education should develop a long-term financial plan that is underpinned by the Capital Projects Master Plan, student population projects and workforce plans, and that supports the delivery of the education strategy.

BETTER STAKEHOLDER ENGAGEMENT IS NEEDED

- 49. Effective stakeholder engagement is essential for the education system to operate as intended. As previously outlined, there are a number of bodies providing direction, advice and guidance, including the Minister for Education, MEYSAL, DES, the Education Council and OES. It is essential that priorities and changes in policy be communicated, disseminated and commonly understood by all those concerned, including teachers and other school staff, parents and students.
- 50. We found that MEYSAL and DES engage extensively with staff in public schools, holding a range of regular meetings to ensure systematic communication, share good practices and identify and mitigate potential problems. For example, there are bi-weekly meetings between MEYSAL and DES; a monthly Education Leadership Forum led by the Director of DES and attended by all school Principals; and a monthly Principals' Consultative Council, which is led and attended by school Principals.
- 51. However, there is no overall strategy for parental engagement. Currently, each school develops its own approach to parental engagement, which is reviewed and approved by DES, as one approach does not fit all. Although there are benefits to this approach, as engagement can be tailored to meet the needs of each school and group of parents, there are also risks that messages may not be communicated consistently or that parents may not be adequately engaged in some matters.

- 52. Our audit found that two recent policies were developed and implemented without sufficient parental engagement or consultation with teachers. These included the following:
 - MEYSAL developed a "Dress Code Policy" in July 2018 that was implemented in September of the same year. The aims of the policy were to set out expectations in relation to the dress code for all public schools and to teach students the importance of presenting themselves in a well-groomed manner and in dressing for purpose. The policy was released a few weeks before the beginning of the school term on 1 September 2018, which did not allow sufficient time for Principals and teachers to devise strategies for its implementation, communicate it to parents and address any concerns raised.
 - The Government awarded salary increments to teachers in September 2018. A further increase
 was scheduled to take effect in September 2019 but has since been postponed to
 September 2020. The increments have resulted in some anomalies between the salaries of
 teachers and other educationalists and SEN specialists. This has caused some unease among the
 educationalists and SEN specialists.

Recommendation 6: The Ministry of Education and Department of Education Services should ensure that there is effective engagement with all stakeholders in the development of strategies, and that policies and changes are communicated well in advance of implementation dates.

EDUCATION AND ECONOMIC DEVELOPMENT PRIORITIES ARE NOT CLEARLY LINKED

53. The SPSs state that the Government is focused on improving education attainment and ensuring full Caymanian employment (e.g. by ensuring a fair work permit regime). However, we found that there is no clear link between the vision and priorities for education and economic priorities. For example, it is not clear from the SPSs how the education system will produce Caymanians who possess the skills required in the job market. In the absence of any clear link, we assessed how scholarship funding and technical and vocational education and training (TVET) may contribute to economic development priorities.

SCHOLARSHIP FUNDING IS NOT ALIGNED TO ECONOMIC DEVELOPMENT PRIORITIES

- 54. The Government, through the Education Council, provides educational scholarships to Caymanian students. The aim of the scholarship funding is to provide Caymanian students with every possible opportunity to fulfil their education and career goals. The Scholarship Secretariat, a department under MEYSAL, administers the scholarship funding on behalf of the Education Council.
- 55. Scholarship funding increased by 4 per cent from \$10.7 million in 2013-14 to \$11.2 million in 2018. Over the same period, the number of students receiving scholarship funding increased by 44 per cent (from 1,133 to 1,628 students).

- 56. We were told that the reasons why the number of scholarship students increased at a higher rate than the scholarship funding are two-fold. First, the private sector offers scholarships to eligible students and some students qualify for both public and private sector scholarships. In such cases, the private sector scholarship is awarded first and a government scholarship is awarded to meet the remaining costs. Second, the Scholarship Secretariat has implemented tighter monitoring controls. As a result, some students are not receiving any scholarships funds even though they are shown in the scholarship data as beneficiaries. Examples of such instances are as follows:
 - Failure to achieve the required Grade Point Average (GPA) or maintain the required credits. The Scholarship Policies and Guidelines (the Guidelines) stipulate minimum requirements for GPA and university credits that scholarship beneficiaries must achieve to retain their scholarship funding.
 - Deferrals of scholarship opportunities for students who choose to take gap years.
 - Reduction in students' ability to gain scholarships mid-year. Students are not allowed to access scholarships mid-year if their applications have been denied at the beginning of the academic year.
- 57. The Secretariat administers the scholarship funding based on the Guidelines, which set clear criteria and expectations for who can access scholarship funding and the minimum requirements (including academic achievement) for beneficiaries to retain the funding. However, we found that the Secretariat does not:
 - have robust monitoring and reporting arrangements in place to ensure that scholarship funding is achieving its aims;
 - collate and retain data on the subjects and courses funded; and
 - retain destination data of scholarship recipients for analysis, for example, whether they are employed in the Cayman Islands and in which professions.
- 58. Without this information, it is difficult to determine whether scholarship funding is achieving its intended purpose or how it is contributing to the Government's economic priorities.
- 59. We compared the university courses undertaken by scholarship beneficiaries in 2017 with work permit data published by the ESO for the same year noting there is no clear link between the two. We also noted that the Scholarship Secretariat does not track the university courses undertaken by scholarship recipients who undertake their studies in the Cayman Islands.

Recommendation 7: The Scholarships Secretariat should start to collect, analyse and report information on all scholarships annually to better demonstrate how scholarship funding is achieving its intended purpose and contributing to economic priorities. The data collected should include the subjects and courses funded and the destinations of scholarship recipients.

Recommendation 8: The Government should identify and implement strategies to encourage beneficiaries to undertake courses that are aligned to current and projected work permit needs.

THERE ARE LIMITED VOCATIONAL TRAINING OPPORTUNITIES

- 60. The Government has highlighted the importance of vocational trades in the Cayman Islands and the importance of encouraging young Caymanians to take up these trades. Technical and Vocational Education and Training (TVET) has featured consistently as a focus area in the SPSs since 2013. However, there is no national strategy for TVET.
- 61. Currently, most vocational training opportunities are provided at the Cayman Islands Further Education Centre (CIFEC). CIFEC offers vocational opportunities based on the Business and Technology Education Council (BTEC) suite of qualifications covering 15 areas, which include applied science, art and design, beauty therapy, construction, creative media, motor vehicle repair, sport and leisure, and hospitality. CIFEC students can study for a BTEC qualification at Level 1, 2 or 3 depending on their prior skills, qualifications and experience. Each programme includes a year-long internship with an employer. ²⁵ CIFEC also offers two apprenticeship programmes, one with the Cayman Islands Government's Public Works Department and a water sports programme with some private companies.
- 62. We were told that CIFEC engages with the private sector to identify vocational employment needs. We also compared the enrolment by industry at CIFEC to work permit data published by the ESO noting that there is a strong correlation between work permit data and enrolment at CIFEC. There is need for documented strategies to ensure CIFEC is offering the necessary courses both for current and future TVET job opportunities.
- 63. Public secondary schools also provide some TVET courses alongside academic teaching. Some TVET courses form part of the national curriculum, for example, physical education, health development, and design and technology. Each school decides what additional TVET courses to offer, with DES' approval. We reviewed the TVET courses provided at each of the public secondary schools; the courses provided are broadly in line with work permits currently being awarded. This indicates that TVET courses provided by public schools may reduce the number of people that will need to be recruited from outside the Cayman Islands in the future although this will also be influenced by future demand from employers.

Recommendation 9: The Ministry of Education should develop a national strategy for Technical and Vocational Education and Training (TVET) that takes into account the Government's economic priorities and the current and future needs of employers.

²⁶ Work permit data, Economics and Statistics Office.

²⁵ Sample BTEC qualification levels and the Cayman Islands National Qualification Framework are set out in Exhibit 2.

GOVERNMENT SPENDING ON EDUCATION

64. Education accounts for a significant proportion of government spending. The Government funds all public schools in the Cayman Islands, provides funding to private schools, and awards scholarship funding to Caymanian students. This section of the report discusses the Government's spending on education and assesses the link between the use of resources and student performance.

THE GOVERNMENT SPENDS AROUND \$86 MILLION A YEAR ON PUBLIC SCHOOLS

GOVERNMENT SPENDING ON PUBLIC SCHOOLS INCREASED FROM 2014 TO 2018 AND ACCOUNTS FOR THE LARGEST PORTION OF PUBLIC EXPENDITURE

65. The Government spent \$86 million on public school education in the year ended 31 December 2018. Exhibit 7 shows that over five years, government spending on education increased by 17 per cent, from \$73.4 million in 2013-14 to \$85.6 million in 2018. ²⁷ The increase in expenditure from 2015-16 to 2016-17 and 2018 was mainly a result of increases in payroll (salaries, wages, pension and healthcare), maintenance of school buildings and student transportation costs. The increase in payroll costs is linked to more education staff (as outlined earlier in Exhibit 5) and a rise in teachers' pay. Exhibit 7 also shows that over the same five years, education spending increased from 9.8 per cent of core government spending to 12.7 per cent. In 2018, spending on education accounted for the largest percentage of core government spending. ²⁸

²⁷ For the purposes of this analysis, the total expenditure of \$93.0 million incurred in 2013-14 has been adjusted to remove the impact of non-recurring impairment losses of \$19.6 million incurred in that year.

²⁸ Core government spending includes expenditure incurred by Cayman Islands Government Ministries, Portfolios, and Office of the Auditor General, the Cabinet Office, Office of the Ombudsman, Office of Public Prosecution and Judicial Administration. It does not include expenditure incurred by Statutory Authorities and Government Companies.

90,000 80,000 70,000 60,000 50,000 40,000 30,000 20,000

Exhibit 7 - Government expenditure on public school education in \$ and as a per cent of public spending, 2014-2018

Source: OAG analysis of data drawn from IRIS for 2014 to 2018.

2014

10,000

Note: 2016-17 was an 18-month period from 1 July 2016 to 31 December 2017. We have pro-rated expenditure for 12 months.

2016

2017 (Pro-rated)

Per cent of Public Spending

66. Exhibit 8 shows that the largest area of spending in the year ended 31 December 2018 was personnel costs (salaries, wages, pensions and healthcare costs), which accounted for 67 per cent (\$57.3 million). The second largest area of spending was on depreciation (11 per cent or \$9.0 million); this is mainly related to the school estate, which was valued at \$166.9 million.

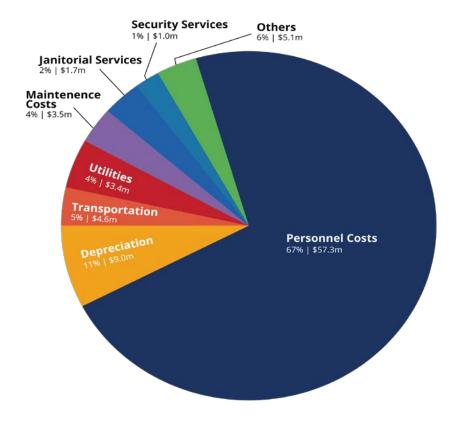
2015

Actual Expenditure

0.0%

2018

Exhibit 8 - Education spending in 2018, by type



Source: OAG analysis of unaudited data drawn from IRIS for the year ended 31 December 2018

THERE IS SOME TARGETING OF RESOURCES FOR SPECIFIC INITIATIVES

- 67. The majority of the DES budget is allocated to schools using a funding formula, although there is some targeting of the centrally held DES budget. MEYSAL has some specific budgets for the curriculum team (numeracy, English, STEM) and special projects, but these are small.²⁹ For example:
 - The curriculum team has ring-fenced funding for literacy initiatives as it is a priority area.
 - The special projects budget consists of individual ring-fenced funding for a range of educational areas. These include funding for Tier 3 literacy interventions (the Reading Recovery Programme) and for reviewing and developing science teaching. The special projects align with MEYSAL's Strategic Objectives, which are set out in the Budget Statements for 2018 and 2019.

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²⁹ STEM refers to science, technology, engineering and mathematics.

68. Some staff resources are allocated based on priority areas and attainment performance. For example, literacy and numeracy coaches are deployed based on attainment data and teacher performance assessments, to help improve the quality of teaching.

THE RATIONALE FOR PRIVATE SCHOOL FUNDING IS NOT CLEAR

- 69. The Government provided around \$1.5 million a year to the 11 private schools in the Cayman Islands between 2012-2013 and 2016-2017, although this was reduced to \$1.0 million in 2018. We were told that this reduction was a result of budget cuts across the Cayman Islands Government as a whole.
- 70. We found that there was no clearly documented rationale for this funding, setting out its purpose or what it was expected to achieve. We were told that the rationale for the funding is historical, originally based on an assessment from around 15-20 years ago that there were not enough places for Caymanian students in public schools. A decision was made at that time to provide funding to private schools to make places available for Caymanian students. However, it is not clear how many places the funding was expected to buy or if these places are still needed.
- 71. As previously outlined, the Government introduced a compulsory Year 12 for all students in 2010. Some Year 12 students in Grand Cayman have to attend private schools for their final year; they receive scholarships for this to cover the cost of school fees.
- 72. Private schools in the Cayman Islands are represented by the Private Schools Association (PSA). The PSA's Bylaws specify the minimum requirements for private schools to be admitted as members, making them eligible to receive a share of government funding. MEYSAL allocates the funding in two ways: half is allocated as a block grant of equal amount to each PSA member school; the other half is allocated as a variable grant based on each member school's enrolment as a percentage of the total PSA member schools' enrolment.
- 73. As part of the budgeting process, the PSA signs a Purchase Agreement with the Government, which sets out the outputs to be delivered. For example, the Purchase Agreement for 2018 and 2019 specifies that 11 to 13 schools are to be funded; the minimum enrolment for both primary and secondary private schools; and timelines within which private schools should submit required information to MEYSAL. The signed Purchase Agreement for 2018 and 2019 also states that the aims of the funding are to ensure that private schools:
 - are registered and in good standing with MEYSAL;
 - are subject to external school inspections by the OES;
 - submit complete and accurate information on standards of achievement and progress of students;
 - submit complete and accurate students' enrolment and attendance data;
 - submit evidence of provision of full-time education for compulsory age students;

- submit evidence of mandatory subjects taught including TVET where applicable;
- submit strategic and/or school improvement plan and annual progress reports;
- submit an outline of SEN provision;
- submit evidence of Ministry approved child protection/prevention training for all staff members;
- submit complete and accurate staffing information; and
- submit evidence of participation in national cultural and sporting initiatives.
- 74. MEYSAL monitors private schools' compliance with the outputs specified in the Purchase Agreement. Our review of the "Assisted schools: Checklist for Purchase Agreement" for the 2016-17 and 2018 purchase agreements confirmed that the Ministry monitors the provision of the required information by private schools. However, we found no evidence that corrective action was taken when the PSA or its members did not produce all of the specified outputs. For example, we found that some private schools did not meet all of the requirements, yet the Private Schools Association still received the full amount of funding.

Recommendation 10: The Ministry of Education should develop and document a clear rationale for the provision of funding to private schools that clearly specifies the purpose of the funding and the outcomes the Ministry expects to be delivered.

Recommendation 11: The Ministry of Education should ensure that it takes corrective action, where monitoring identifies a lack of compliance by private schools against the terms and conditions specified in the Purchase Agreements.

THE LINK BETWEEN USE OF RESOURCES AND STUDENT PERFORMANCE IS NOT CLEAR MAKING VALUE FOR MONEY DIFFICULT TO ASSESS

- 75. International research suggests that how an education budget is spent has a greater impact on attainment levels than simply increasing the levels of expenditure. Research also suggests that the impact on attainment results could be further improved by targeting funding at schools and students where the need to improve attainment is greatest.³⁰
- 76. As part of the budgeting process, the Government specifies the outputs to be purchased from MEYSAL in both quantitative and qualitative terms. However, these are mostly inputs or outputs, such as the number of schools, number of students, number of curriculum subjects taught, and number of tests administered. We found that MEYSAL does not monitor or report progress against the outputs expected.

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Does spending more on education improve academic achievement?, The Heritage Foundation (2008) https://www.heritage.org/education/report/does-spending-more-education-improve-academic-achievement

- 77. The Government does not specify outcomes or success measures for education as part of the budgeting process. The absence of outcomes or success measures and of monitoring and reporting what is delivered against what is expected makes it difficult to determine whether the \$86 million spent on public school education is providing value for money.
- 78. MEYSAL allocates some funding for specific projects and new initiatives, although this is a small proportion of the education budget. To access the funding, Heads of Department are expected to submit a formal Decision Briefing Paper for approval by the Deputy Chief Officer, Chief Officer or Minister.³¹ The papers require a range of information, including budget implications, benefits to students, Key Performance Indicators (KPIs) to evaluate the effectiveness of the project, and how the project will be monitored and evaluated. However, our review of a sample of completed Decision Briefing Papers found that some information was missing. For example, where KPIs were included, they were not always specific; and the monitoring and reporting arrangements were not always clearly documented.

Recommendation 12: The Government should specify clear outcomes and success measures for education as part of the budgeting process, and should ensure that performance against these is monitored and publicly reported.

STUDENT-TEACHER RATIOS ARE LESS THAN TARGETS AND REGIONAL AND INTERNATIONAL COMPARISONS

79. The Budget Statements specify that the average student-teacher ratio (STR) for Cayman Islands public schools should be 15:1 for primary schools and between 10:1 and 13:1 for secondary schools. Although STR is not an indicator of better educational outcomes this is one of the few measures set for education. We therefore compared STR in public schools against the target specified, and compared STRs regionally and internationally. Between 2013 and 2017, the STRs in public schools were less than the targets set (Exhibit 9). Exhibit 9 also shows that the STR in Cayman Islands public schools was significantly less than other Caribbean countries and many other countries.

³¹ Further approval by the Cabinet and the Legislative Assembly may be required if the funding for the project was not included in the budget.

Exhibit 9 - Cayman Islands student-teacher ratios (STRs) compared to target, and regional and international STRs

	CAYMAN ISLANDS ACTUAL STR[1]	CAYMAN ISLANDS TARGET STR[2]	REGIONAL STR[3]	OECD COUNTRIES STR[4]
PRIMARY	11.39:1 - 14.03:1	15.00:1	21.45:1 - 22.24:1	8.82:1 - 27.70:1
SECONDARY	8.15:1 – 10.72:1	10.00:1 - 13.00:1	16.49:1 - 17.16:1	6.08:1 - 33.90:1

^[1] Statistics Compendium 2017, Education 2017, Economics and Statistics Office

Source: OAG analysis of Budget Statements and data from Economics and Statistics Office, World Bank and OECD

THE COST PER STUDENT IS NOT CALCULATED OR ANALYSED

- 80. Cost per student is a good efficiency measure, as it shows the expenditure on each student across different schools and allows questions to be asked about why the cost per student may be higher or lower. It can also provide a good benchmark for comparing costs within a jurisdiction or internationally. However, cost per student needs to be considered alongside other information, as there may be good reasons why some schools are more expensive to operate than others, for example, for specialist and smaller schools or schools with better performance or outcomes. Neither MEYSAL nor DES collates and analyses data on the cost per student.
- 81. For the purposes of our audit we calculated the average cost per student. As outlined earlier, spending on public school education increased by 17 per cent between 2014 and 2018, while the number of students in public schools decreased by 4 per cent between 2013 and 2017. Our analysis shows that the average annual cost per student increased by 17 per cent over the five years, from \$14,811 in 2014 to \$17,264 in 2018 (Exhibit 10). The increase in cost per student was mainly a result of increases in payroll (salaries, wages, pension and healthcare) and maintenance of school buildings.

^[2] MEYSAL Budget statements for the 18-month period ending 31 December 2017

^[3] Education statistics, World Bank https://data.worldbank.org/indicator

^[4] Student-teacher ratio and average class size, Organization for Economic Co-operation and Development https://stats.oecd.org/Index.aspx?DataSetCode=EAG_PERS_RATIO

³² The number of students in the cost per student computation used for audit purposes was based on enrolment data published by the ESO for 2014 to 2017. The 2018 computation is based on enrolment data provided by DES.

³³ Our computation of the average cost per student is based on the total expenditure incurred by MEYSAL on schools and administrative staff minus transportation costs as these are not directly related to the delivery of school education.

³⁴ The 2013-14 cost per student has been adjusted to eliminate the impact of one-off impairment losses of \$20m incurred in that year.

- 82. For the purposes of our audit, we also calculated the annual cost per student by school from 2014 to 2018 (Exhibit 10). This further analysis shows that the annual cost per student varied significantly across schools. For example:
 - Little Cayman Education Services with only 2 students had the highest cost per student, approximately \$52,000. Lighthouse School (a special school for students with SEN) had the second highest cost per student, \$31,000.
 - The cost per student at the remaining primary schools ranged from \$6,200 at Red Bay Primary School (436 students) to \$14,000 at West End Primary School (70 students).
 - The cost per student in the three secondary schools also varied. Layman E. Scott High School had the highest cost per student at \$20,000 followed by Clifton Hunter High School and John Gray High School with costs per student of \$12,000 and \$10,000 respectively.

Exhibit 10 - Average annual cost per student by school, 2014-2018

	2014	2015	2016	2017	2018
AVERAGE FOR ALL SCHOOLS	14,811	14,915	14,973	16,291	17,264
OTHER					
Lighthouse School	31,407	30,085	28,231	30,309	30,877
SECONDARY SCHOOLS					
Layman E. Scott Sr. High School	19,780	19,051	19,363	18,829	19,664
Clifton Hunter High School	12,868	13,118	13,269	12,589	12,282
John Gray High School	16,555	10,709	10,429	9,587	10,078
PRIMARY SCHOOLS Little Cayman Education Services	31,114	24,131	15,100	29,280	51,587
West End Primary School	31,114 12,177	24,131 10,451	15,100	29,280 14,607	14,097
Edna M Moyle Primary School	10.510	10,798	13,984	12,802	13,121
Creek and Spot Bay Junior School	13,908	12,148	13,548	13,510	15,820
East End Primary School	11,246	9,936	11,370	10,695	12,488
Creek and Spot Bay Infant School	14,540	8,564	8,007	9,312	13,069
George Town Primary School	16,978	8,876	8,766	8,911	8,958
Bodden Town Primary School	8,240	7,798	7,291	6,924	7,059
Prospect Primary School	6,979	7,230	6,824	7,111	7,044
Sir John A. Cumber Primary School	7,029	6,914	6,804	6,845	7,877
Red Bay Primary School	6,718	6,637	6,786	6,546	6,197
Savannah Primary School	7,051	6,495	6,362	6,109	6,512

Source: OAG analysis of data drawn from IRIS for 2014 to 2018 and enrolment data over the same period provided by DES.

Note: Creek and Spot Bay Infant School and Junior School are two separate schools but share the same site; Little Cayman Education Services has a very small student population and average costs per student can therefore change significantly with the addition or deletion of one student.

- 83. The variation in the annual cost per student across schools may be caused by a range of factors such as type of students (for example, Lighthouse School requires more specialist staff) and the student population size (as most education costs for primary schools are fixed, smaller primary schools will have higher costs per student).
- 84. For comparison, we calculated the average cost per student for 2016-17 for the 11 private schools registered with the PSA noting that the average cost per student of \$16,291 in public schools for that year was 66 per cent higher than the \$9,825 average cost per student in the private schools.
- 85. We also reviewed the data on cost per student in 33 OECD countries for 2015 (the latest year for which data is available) and compared it to the Cayman Islands.³⁵ Although these may not be directly comparable, we found that the 2014-15 average cost per student in the Cayman Islands, \$14,915, was higher than in other countries. The OECD data show the following:
 - The average cost per student among OECD countries was \$7,000 at the primary school level and \$8,000 at the secondary level.
 - Luxembourg had the highest cost per student, \$17,000, for both primary and secondary school levels.
 - Mexico had the lowest cost per student at the primary school level and secondary school level, at \$2,000 and \$3,000 respectively.
 - Among the 33 OECD countries, the Cayman Islands' cost per student was the second-highest after Luxembourg.

Recommendation 13: The Ministry of Education should calculate, analyse and review the cost per student across all public schools on a regular basis. It should benchmark these costs with the private schools and with comparable countries regionally or internationally in order to inform decision making.

 $^{^{35}}$ Education spending: Tertiary / Early childhood education, US dollars/student, 2016 or latest available, OECD. We converted the US Dollar denominated cost per student that we obtained from the OECD to Cayman Islands Dollars at an exchange rate of USD 1 = KYD 0.84.

STUDENT ATTAINMENT AND ACHIEVEMENT

- 86. Assessing, monitoring and measuring performance at the school, teacher and student levels is central to understanding how to improve attainment. Monitoring how students are progressing allows teachers and schools to identify:
 - whether students need extra help;
 - what help schools can offer; and
 - how successful interventions are at improving student attainment.
- 87. In this section of the report we assess student attainment levels including variations in attainment and factors affecting attainment.

STUDENT ATTAINMENT HAS IMPROVED IN RECENT YEARS BUT THERE ARE AREAS OF SIGNIFICANT UNDERPERFORMANCE

- 88. Students' learning experiences are made up of earning formal qualifications, accredited wider achievement awards, vocational qualifications and personal achievement (e.g. sports clubs). For public schools, DES uses a comprehensive range of formal measures of student attainment and achievement, including the following:
 - Dynamic Indicators of Basic Early Literacy Skills (DIBELS) are measured on entry to primary school, with on-going progress assessment at the primary school level.
 - Cognitive Abilities Tests (CAT4) are taken in Year 4 (age 8-9) and Year 6 (age 10-11) in public primary schools. Students in public secondary schools take the CAT4 test in Year 9 (age 13-14), which predicts the grades that they are capable of achieving by the end of Year 11 (age 15-16).
 - Formal qualifications are taken at Year 11 and Year 12 (age 16-17) at secondary school; they include both academic and vocational qualifications.³⁶
- 89. Overall, our analysis shows that student attainment improved over the five years from 2014 to 2018, although performance fluctuated within this period. However, significant areas of underperformance remain across all subjects, and analysis of attainment data at the primary and secondary levels shows significant gaps in student performance between genders. These gaps have remained fairly consistent over the five years.

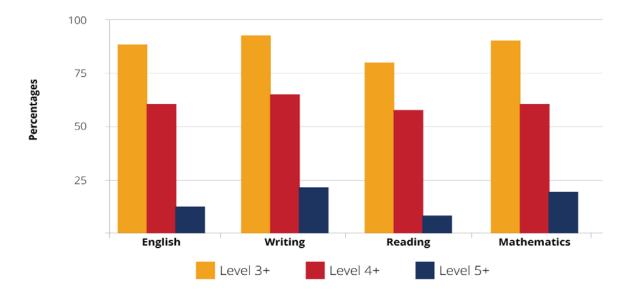
³⁶ As outlined earlier, students may also complete A-levels and Associate degrees that continue their education beyond Year 12.

90. Staff view the "attainment gap" as primarily in terms of whether students are performing below the expected level, and their focus is on reducing the gap between the lowest and highest achievers. However, there is a risk that higher-performing students may not be encouraged to perform even better. We found that there does not appear to be a wider consideration of the extent of the attainment gap across the system and how it is changing over time.

PRIMARY SCHOOL ATTAINMENT IS LOWER THAN EXPECTED AND VARIES BY SUBJECT AND SCHOOL

91. At the primary school level, students are tested in three subjects at the end of Key Stage 2 (Year 6): Mathematics, Reading, and Writing. Students' Reading and Writing results contribute to their overall English score. Students are expected to achieve Level 4 at this stage. Exhibit 11 shows that in 2018, the expected level was not achieved; between 59 per cent and 66 per cent of students achieved Level 4 or higher in each of the four subjects. DES does not publish information on how many students pass all four subjects but for the purposes of our audit, we obtained that information for 2018. This shows that 45 per cent of students achieved the expected level in all four subjects.

Exhibit 11 - Key Stage 2 results by subject and level achieved (2018)



Source: OAG analysis of Key Stage 2 Results data provided by DES

92. Student performance is predicted using CAT4 tests taken at both primary and secondary school. Testing in 2018 indicated that by the end of Key Stage 2 (Year 6), 98 per cent of primary school students should achieve Level 4 or higher in English and 93 per cent in Mathematics. However, the actual attainment levels were significantly lower than predicted at 61 per cent for English and 62 per cent for Mathematics (Exhibit 12).

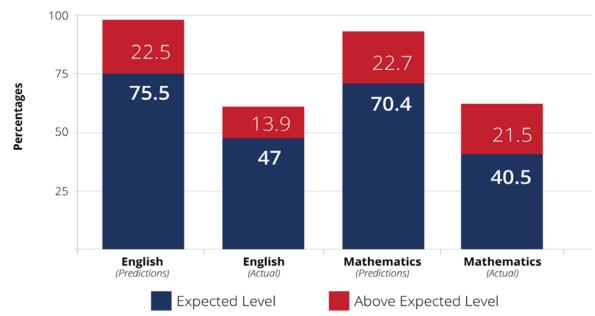


Exhibit 12 - Key Stage 2 achievement of Level 4 and higher vs. CAT4 predictors for English and Mathematics (2018)

Source: 2017-18 Education Data Report

- 93. Over the five years 2014 to 2018, overall performance in Key Stage 2 tests varied. For example, performance in Mathematics and Writing improved across Levels 3 to 5, while performance in English and Reading declined across the same levels. The percentage of students achieving Level 4 or higher in Mathematics increased from 48 per cent in 2014 to 62 per cent in 2018. However, the percentage of students achieving Level 4 or higher in Reading decreased from 77 per cent in 2014 to 59 per cent in 2018.
- 94. OES reported in 2018 that since the 2014-15 baseline inspections, DES introduced Mathematics and Reading "recovery" programmes and further English intervention groups; these were successful in addressing the needs of a number of lower-achieving students in mathematics and reading. These initiatives, such as the reading recovery programme, are based on evidence, have clear aims and objectives with expected outcomes, and are monitored through the use of data. The OES inspection regime has resulted in changes to some new ways of defining improvement.
- 95. We noted a significant variation in performance at Key Stage 2 across primary schools. The extent to which attainment data was affected by the small cohort sizes in some primary schools is unknown, but there was a wide gap in attainment across primary schools. Exhibit 13 shows, by school, the

percentage of students achieving Level 4 or higher in Reading, Writing, English and Mathematics in 2018. This analysis shows that the gap between the lowest- and highest-performing schools was 49 per cent in Writing, 42 per cent in Reading, 45 per cent in English and 57 per cent in Mathematics.³⁷

Exhibit 13: Key Stage 2 Level 4 and above passes by subject and primary school (2018)

	WRITING	READING	ENGLISH	MATHEMATICS
SCHOOLS	L4+	L4+	L4+	L4+
Little Cayman Education Services	100%	100%	100%	100%
Bodden Town Primary School	53%	40%	54%	68%
East End Primary	46%	70%	54%	31%
Edna M Moyle Primary School	66%	58%	59%	42%
George Town Primary School	73%	60%	63%	47%
Prospect Primary School	94%	82%	86%	83%
Red Bay Primary School	65%	52%	60%	67%
Creek and Spot Bay Junior School	75%	62%	69%	76%
Sir John A. Cumber Primary School	45%	54%	41%	36%
Savannah Primary School	67%	60%	65%	79%
West End Primary School	75%	63%	75%	88%
ATTAINMENT GAP	49%	42%	45%	57%

Source: OAG analysis of KS2 summary data provided by DES

Note: Highest (with the exception of Little Cayman Education Services) and lowest pass rates for each subject are highlighted in red.

SECONDARY SCHOOL ATTAINMENT HAS IMPROVED BUT IS STILL BELOW EXPECTATIONS

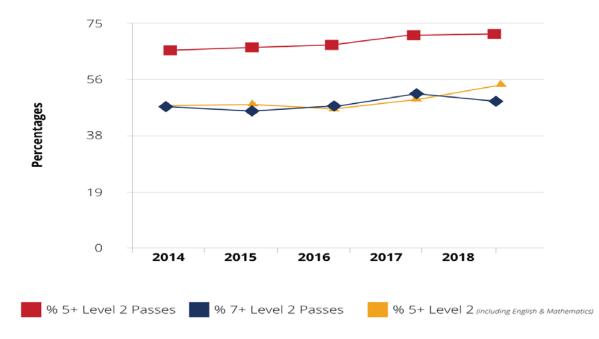
96. A key measure of attainment is the number of high school students achieving five or more passes at Level 2. The expectation is that all students will pass at least five subjects, including English and Mathematics, at Level 2.³⁸ This is not being achieved; the 2018 results are as follows:

³⁷ Little Cayman Education Services has been omitted from the calculation of the performance gap as it had a very small number of students (between 2 and 4) during the period under review, resulting in all students achieving 100 per cent across all four subjects.

³⁸ The 2018 Education Data Report

- 71.7 per cent of Year 12 students achieved 5+ Level 2 passes. However, when Mathematics and English are included the pass rate is reduced to 54.3 per cent.
- Less than half (42.7 per cent) of all Year 12 students achieved 7+ Level 2 subjects including English and Mathematics.
- Performance in Mathematics was significantly lower than performance in English, with just over half (56.6 per cent) of all Year 12 students achieving a Level 2 pass in Mathematics compared to 78.2 per cent achieving a Level 2 pass in English.
- 97. However, attainment of Year 12 students improved between 2014 and 2018 (Exhibit 14). The percentage of students achieving 5+ Level 2 passes (excluding English and Mathematics) increased from 66.1 per cent in 2014 to 71.7 per cent in 2018. The percentage of Year 12 students achieving 5+ Level 2 passes (including English and Mathematics) increased from 47.5 per cent in 2014 to 54.3 per cent in 2018.

Exhibit 14 – Secondary school student attainment of Level 2 passes, 2014-2018



Source: 2017 Compendium of Statistics, Economic and Statistics Office, Government of the Cayman Islands (the "Government"), November 2018, Education Data Report for the 2017-18 academic year, December 2018.

98. Further analysis shows that students' performance is improving in English and Mathematics. Exhibit 15 shows that the percentage of students achieving Level 2 Mathematics increased by 14 per cent, from 49.6 per cent in 2014 to 56.6 per cent in 2018. Over the same five-year period, there was an 11 per cent increase in the percentage of students achieving Level 2 English, from 70.3 per cent to 78.2 per cent.

85 76 66 Percentages 57 47 38 28 19 9 0 2014 2015 2016 2017 2018 %Level 2 Mathematics %Level 2 English

Exhibit 15 - Secondary school student attainment for Level 2 English and Mathematics, 2014-2018

Source: 2017 Compendium of Statistics, Economic and Statistics Office, Government of the Cayman Islands (the "Government"), November 2018, Education Data Report for the 2017-18 academic year, December 2018.

YEAR 12 SIGNIFICANTLY IMPROVES ATTAINMENT LEVELS

- 99. In 2010, secondary education in the Cayman Islands was restructured and a mandatory Year 12 was introduced. All students are required to complete Year 12 (age 17) before they can graduate, although public schools in Grand Cayman offer secondary education only to Year 11 (age 16).
- 100. As outlined earlier, public school students are required to continue their education in Year 12 in a number of ways, which may include the following:
 - Attending UCCI to start an Associate Degree.
 - Studying for A-levels at a private school on island.
 - Attending a programme off-island to study for A-levels or other post-compulsory-education programme.
 - Resitting examanitions in English and Mathematics at CIFEC.
 - Taking technical and vocational education and training (TVET) at CIFEC or Layman E. Scott Sr. High School.
 - Attending work experience and apprenticeship programmes run through CIFEC or Layman E. Scott Sr. High School.
- 101. The examinations that students take in Year 11 contribute to their cumulative results at the end of Year 12. For example, for students that failed English or Mathematics or both in Year 11 in 2017 would have attended CIFEC or Layman E. Scott Sr. High School or CIFEC in 2018 to re-sit these exams

- in Year 12. These students' Year 12 exam results are then aggregated with the 2017 Year 11 results from their cohort and published as Year 12 results for the full cohort in 2018.
- 102. It is not clear if introducing Year 12 was intended to improve student outcomes. However, our analysis shows that Year 12 does improve student attainment for those students that need to re-sit examinations, with a significant improvement across all levels between Year 11 and Year 12. 39 Exhibit 16 shows that in 2018, overall performance by Year 12 students improved significantly from Year 11 (2017). The biggest improvement in performance was in relation to students achieving 5+ Level 2 subjects, which increased by 18 per cent from Year 11 to Year 12. Our analysis also found that the higher attainment levels by Year 12 students were consistent across the five years 2014 to 2018.

Exhibit 16 - Difference in performance between Y11 and Y12 (same cohort)

	YEAR 11 (2017) % all students achieved	YEAR 12 (2018) % all students achieved	% POINT GAIN FROM Year 11 to Year 12
7+ Level 2 Subjects	33	49	16
7+ Level 2 Subjects (including English & Mathematics)	32	43	11
5+ Level 2 Subjects	54	72	18
5+ Level 2 Subjects (including English & Mathematics)	42	54	12
Level 2 English	68	78	10
Level 2 Mathematics	46	57	11

Source: OAG analysis of Y11 and Y12 examination results data provided by DES

103. We also found that the attainment of Year 12 students against Key Stage 4 CAT4 predictors significantly improved against the same predictors at Year 11 (Exhibit 17). For example, 54 per cent of Year 11 students achieved 5+ Level 2 subjects, including English and Mathematics; 20 per cent below Key Stage 4 CAT4 predictors. For the same cohort of students, 72 per cent achieved 5+ Level 2 subjects, including English and Mathematics in Year 12; 2 per cent less than the Key Stage 4 CAT4 predictors.

³⁹ Note that Year 12 is usually for students to start studying for A-level (or equivalent) examinations.

Exhibit 17 - CAT4 prediction vs. Actual performance at Y11 and Y12 (same cohort)

	YEAR 11 (2017)		YEAR 12 (2018)		
	CAT 4 Prediction	Actual Performance	CAT 4 Prediction	Actual Performance	
5+ Level 2	74%	54%	74%	72%	
5+ Level 2 (Including English & Mathematics)	44%	42%	44%	54%	
Level 2 English	72%	68%	72%	78%	
Level 2 Mathematics	55%	46%	55%	57%	

Source: OAG analysis of Y11 and Y12 examination results data provided by DES

104. CIFEC is one of the main providers of Year 12 education and plays a critical role in providing secondary, tertiary and vocational education for students in the Cayman Islands. However, we found that it has a poor reputation among students and parents as it was introduced as a place for underperforming students to re-sit failed exams. CIFEC must also accept students from the Inclusion Unit alongside mainstream high school students, which may affect its overall attainment levels.

THERE ARE SIGNIFICANT GAPS IN ATTAINMENT BETWEEN MALE AND FEMALE STUDENTS AT BOTH PRIMARY AND SECONDARY SCHOOL LEVELS

- 105. At the primary school level, an attainment gap exists between male and female students. However, it is not consistent, and it varies by subject, level achieved and over time. Our analysis of the 2018 data for students achieving Level 4 or higher shows the following:
 - Mathematics male students (62 per cent achieved Level 4 or higher) performed better than female students (41 per cent). However, over the five years 2014 to 2018 females improved their performance by 25 per cent and male performance declined by 34 per cent.
 - English female students (68 per cent) outperformed males (54 per cent).
 - Reading female students (62 per cent) outperformed males (56 per cent).
 - Writing female students (72 per cent) outperformed males (59 per cent). Over the five years 2014 to 2018, both male and female students improved their performance but at different rates; males improved by 49 per cent and females by 22 per cent.
- 106. The gender gap also widens as students get older, and there is a significant gender gap in attainment at secondary school level. The 2018 data shows the following:

- Year 12 female students outperformed male students at all levels.
- Achievement of 5+ Level 2 passes, including English and Mathematics (the expected standard) female students (63.3 per cent) outperformed male students (44.1 per cent).
- Achieving 7+ Level 2 passes, including English and Mathematics female students (56.3 per cent) significantly outperformed male students (27.1 per cent).
- 107. Both female and male Year 12 students improved their performance between 2014 and 2018, but the attainment level of female students improved at a greater rate than that of male students. This resulted in an increased gender gap between 2014 and 2018 in all levels, except among Year 12 students achieving 5+ Level 1 passes. The gender gap increased the most among those achieving 7+ Level 2 subjects (including English and Mathematics).

Recommendation 14: The Ministry of Education and Department of Education Services should develop strategies to improve education attainment at all levels. These should include closing gaps in attainment and between genders by improving the attainment of lower-performing students while continuing to motivate higher-performing students to do even better.

ATTAINMENT IS NOT BENCHMARKED REGIONALLY OR INTERNATIONALLY

- 108. International data on attainment performance is reviewed but is not systematically compared against other countries, and there is no public reporting of international comparisons.
- 109. For purposes of the audit, we reviewed publicly available data on the 2018 examination results for Key Stages 2 and 4 in England, although the data are not directly comparable because of differences in curriculum. We compared the percentage of students achieving the expected level or higher in the Cayman Islands and in England at Key Stage 2 and Key Stage 4.
- 110. At Key Stage 2, the comparison shows that the students in England performed better than those in the Cayman Islands. That is, in England, 75 per cent of students at Key Stage 2 achieved the expected level or higher in Reading and 76 per cent in Mathematics. In comparison, only 59 per cent of Cayman Islands students achieved the expected level or higher in Reading, and 62 per cent in Mathematics. Further, in England 78 per cent of students achieved the expected level or higher in Grammar, punctuation and spelling; while 61 per cent of Cayman Islands students achieve the expected level or higher in English and 65 per cent in Writing.
- 111. At Key Stage 4, the comparison shows that the students in England performed better than those in the Cayman Islands in some but not all subjects. In England, 67 per cent of students achieved the expected level in all subjects; 62 per cent in English; and 60 per cent in Mathematics. Student attainment in the Cayman Islands at the same stage was lower by comparison in all subjects (54 per cent) and in Mathematics (57 per cent) but was higher in English (78 per cent).

Recommendation 15: The Ministry of Education and Department of Education Services should systematically benchmark student performance internationally and publicly report the results.

THERE IS A GOOD UNDERSTANDING OF THE KEY FACTORS AFFECTING ATTAINMENT BUT MORE NEEDS TO BE DONE

- 112. There are a number of factors that influence levels of student attainment, including:
 - teacher quality;
 - deprivation;
 - improvement of systems for monitoring and tracking students;
 - increased parental involvement;
 - development of student motivation and engagement; and
 - a child's home environment and the extent to which it is supportive and stimulating during early childhood years.
- 113. Most of these factors require medium- to long-term solutions. It is important that the Government take a long-term approach to planning, as the benefits of changes made may take a number of years before they have any impact on education outcomes.
- 114. Our analysis of recent SPSs found that they reflect some of these factors. For example, improving TVET may help develop student motivation and engagement, and better training of teachers in relation to SEN supports teacher quality. However, the SPSs do not fully reflect all of these factors and cover only the three years ahead. We recommended earlier that the Government develop a long-term strategy for education. The Budget Statements for 2018 and 2019 specify 18 objectives for MEYSAL, covering a range of areas. A number of the objectives reflect the areas that are known to influence attainment, for example, improving stakeholder communications and creating new levels of partnership with parents, the community and the private sector.
- 115. The 2014-15 baseline inspections of public schools identified a number of areas for improvement, including, the quality of teaching and leadership and the use of data. 40 Since then MEYSAL and DES have been focusing on improving these areas.

⁴⁰ Cayman Islands Baseline Inspection of Schools: Overview Report, June 2015

TEACHER QUALITY IS IMPROVING BUT NEEDS TO IMPROVE FURTHER

- 116. In 2014-15, the baseline school inspection reports evaluated the quality of teaching as unsatisfactory in eight out of ten public primary schools. In its re-inspections in 2017-18, OES reported that the quality of teaching had improved significantly, with 85 per cent of lessons found to be satisfactory or better. 41
- 117. The 2017-18 inspections also found that leadership had improved in public primary schools, stating that "the baseline inspection reports identified weak leadership of subjects within the primary schools, particularly mathematics. Since that time, literacy, numeracy and science coordinators have been appointed in each of the schools and training has been provided."
- 118. During 2018-19, OES also carried out inspections of the three public secondary schools, which found the following:
 - Clifton Hunter High School was assessed overall as weak; leadership was satisfactory but effectiveness of teaching was found to be weak.
 - John Gray High School was assessed overall as satisfactory, including both leadership and teaching.
 - Layman E. Scott Sr. High School was assessed overall as satisfactory, including both leadership and teaching.
- 119. DES has been focusing on using teaching assistants to provide interventions and support for students (e.g., where students are taken out of class for one-to-one or small group teaching). DES is also attempting to build capacity among teaching staff in relation to literacy and numeracy initiatives by training and coaching teachers. The OES Annual Report 2018 stated that not all staff providing teaching cover during the year were qualified teachers. Both of these circumstances can affect the quality of teaching provided to students, which is one of the key factors in educational attainment.

DATA IS BEING USED MORE EFFECTIVELY BUT MORE CAN BE DONE TO UNDERSTAND STUDENT PERFORMANCE

120. DES and schools have been focusing on using data more effectively to drive improvements in student performance; DES has a significant amount of data on student performance (also available to schools and MEYSAL). There is a range of information and assessment systems in place to support managing and improving student performance, including SIMS (school information management

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⁴¹ OES Annual Report 2018

- system), a national truancy system, and standardised on-going assessments from entry to primary school.
- 121. Classroom teachers and school administrators have access to the data held in SIMS, and recent school Plans of Action have focused on improving the use of data. Student performance data is monitored regularly by School Improvement Officers at DES, and quarterly meetings are held with schools to discuss performance trends and areas for improvement.
- 122. The OES 2018 Annual Report states "Inspectors found there to be a good range of assessments in place in public primary schools with an appropriate balance of internal and external tests at different stages of the primary years. The information [is]...used to identify at a very detailed level the particular strengths and weaknesses of individual students. This information is also used to identify those students requiring access to intervention programmes." The report also states "Schools were also using surveys to collect information from students about, for example, engagement, but that wide ranging and comprehensive data is not yet used fully by teachers to ensure a close match of tasks to the students' identified learning needs."
- 123. The increased use of data over the past few years has provided a better understanding of the impact that certain initiatives and programmes such as reading recovery have on student performance. However, there is scope to further develop the use of data. For example, recent OES inspections of high schools suggest that further work is required by MEYSAL, DES and schools to better understand what is driving improvement and to put in place strategies to further improve student performance.
- 124. Data on the destination of students after they leave the formal education system can be used to inform curriculum development and improvement strategies. However, neither DES nor the Economics and Statistics Office of the Cayman Islands Government collect destination data on students after Years 11 and 12.

THERE IS SCOPE TO ENGAGE PARENTS MORE

- 125. As outlined earlier, there is no overarching strategy for engaging with parents. Individual schools engage with parents in a variety of ways, including parent-teacher evenings; providing updates using mobile phone apps; and conducting learning sessions with parents on specific topics. However, the success of these approaches in improving parental engagement is not monitored.
- 126. We identified earlier that parents had not been sufficiently engaged before introducing the new school dress policy in 2018. As part of their school inspections, OES surveys parents at each school.

The survey results indicate that there is scope to further improve parental engagement.⁴² Our analysis of the survey results shows the following:

- Most parents believe that communication between schools and parents is effective and timely (75 per cent of primary school parents and 65 per cent of secondary school parents).
- Most parents state that schools respond appropriately to their concerns (75 per cent of primary school parents and 63 per cent of secondary school parents).
- Most parents reported that they found parent-teacher meetings were helpful and regularly held (79 per cent of primary school parents and 71 per cent of secondary school parents). However, when asked the same question, fewer teachers agreed: between 28 per cent and 53 per cent of teachers at primary and secondary schools.
- Fewer parents believe that they are sufficiently involved in the work of the school (65 per cent of primary school parents and 46 per cent of secondary school parents).

TRUANCY CONTINUES TO BE A PROBLEM DESPITE REPORTED STUDENT ENGAGEMENT LEVELS

- 127. As part of its inspection process, OES also surveys students to assess their level of engagement. Based on the 2018 surveys, most primary school students feel that they are engaged in the education system. ⁴³ The results show that 77 per cent reported that their school had asked them how it could improve; 78 per cent believed that the school responded appropriately to their concerns; and 88 per cent stated that they received regular reports on progress. However, secondary school students' engagement levels are lower. ⁴⁴ The survey results for secondary school students show that 58 per cent reported that their school had asked them how it could improve; 48 per cent believed that the school responded appropriately to their concerns; and 70 per cent stated that they received regular reports on progress.
- 128. Despite these survey results, truancy rates are high and have increased over the past five years, which may indicate that a significant minority of students are disengaged from the education system.

⁴² OES survey results based on 323 parents of primary school students and 286 parents of secondary school students.

⁴³ OES survey results based on 487 primary school students as to whether or not schools have asked them how they can improve, schools respond appropriately to their concerns and schools provide them with regular reports on their progress, including next steps to take.

⁴⁴ OES survey results based on 1,440 secondary school students as to whether or not schools have asked them how they can improve, schools respond appropriately to their concerns and schools provide them with regular reports on their progress, including next steps to take.

- 129. Our analysis of truancy data shows that there were a total of 40,299 missed sessions (truancy) in 2017-18. ⁴⁵ There are two sessions in a day, which means that 20,150 teaching days were lost in 2017-18, an average of 8.8 sessions or 4.4 days per student. Exhibit 18 shows the following:
 - The average number of missed sessions per student increased in most schools over the five years 2013-14 to 2017-18.
 - Some schools have a significant truancy problem while others do not. For example, the average number of missed sessions per student in 2017-18 ranged from 0 sessions in East End Primary School and Bodden Town Primary School to 9.6 sessions in North Side Primary School; and from 0.1 session at Layman E. Scott Sr. High School to 19 sessions at John Gray High School. Some schools appear to have a persistently high truancy rate, namely Savannah Primary School, John Gray High School and CIFEC.

Exhibit 18 - Average number of missed sessions per student, by school, 2013-14 to 2017-18

PRIMARY SCHOOLS	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	CHANGE
Sir John A. Cumber Primary School	1.0	0.7	0.8	2.7	6.9	617%
George Town Primary School	0.6	0.4	0.1	0.5	2.3	301%
Savannah Primary School	2.5	5.8	6.7	5.9	6.5	163%
Edna M Moyle Primary School	-	-	-	11.0	9.6	100%
West End Primary School	-	-	-	2.9	2.6	100%
Little Cayman Education Services	-	7.0	3.6	3.5	2.0	100%
Red Bay Primary School	0.6	0.5	0.8	1.3	0.9	47%
Creek and Spot Bay Junior School	-	-	-	-	-	0%
East End Primary School	-	2.2	-	-	-	0%
Creek and Spot Bay Infant School	1.3	2.5	1.2	0.7	0.1	-92%
Bodden Town Primary School	1.2	0.1	4.2	0.7	0.0	-99%
Average	0.6	1.7	1.6	2.7	2.8	333%
SECONDARY SCHOOLS						
John Gray High School	12.2	18.8	21.8	18.7	19.0	56%
Clifton Hunter High School	5.7	0.9	0.8	0.6	6.4	12%
Layman E. Scott Sr. High School	0.9	0.3	0.6	1.5	0.1	-93%
Average	6.2	6.7	7.7	6.9	8.5	36%
OTHER						
Lighthouse School	-	-	0.8	3.3	3.9	100%
Cayman Islands Further Education Centre	22.6	51.4	22.7	23.1	19.9	-12%

Source: OAG analysis of truancy data for the 2017-18 academic year provided by MEYSAL

Note: No data was provided for Prospect Primary School

⁴⁵ DES defines truancy as missed sessions arising from unauthorised absences

- 130. Our analysis of the data also shows that an average of 73 per cent of students missed between 0.1 and 10 sessions in 2017-18; 14 per cent missed between 11 and 20 sessions; and 13 per cent of students missed 21 sessions or more. 46
- 131. DES has introduced a number of measures to tackle truancy in public schools. It developed a Schools Attendance Plan, which sets out schools' responsibilities in relation to attendance management (e.g. type and number of notifications for absent students). Each school has a named person who is responsible for monitoring attendance and referring students to the truancy service. DES has two Truancy Officers in Grand Cayman and one in Cayman Brac. Truancy Officers check referred students against the "at risk" register to identify whether the student or family are working with any other government agencies, such as the Department of Children & Family Services; discuss options with other agencies as necessary; and identify the best options to try and resolve the truancy issue. If interventions to prevent truancy do not work, the issue is escalated and a court order may be issued. Truancy Officers also conduct "sweeps" in which they drive around looking for absent students and return them to school. Given the extent of the truancy problem, it is not clear whether three Truancy Officers are sufficient to manage the workload or if a different approach is needed to address this problem.

Recommendation 16: The Department of Education Services should develop and implement a policy on reducing truancy rates. The policy should specify strategies for targeting the efforts of truancy officers to schools with the highest truancy rates; and ensure that sufficient resources are available to effectively manage and reduce truancy levels.

THE SCHOOL IMPROVEMENT FRAMEWORK HAS IMPROVED IN RECENT YEARS

- 132. The school improvement framework includes a wide range of staff, including School Senior Improvement Officers (SSIOs), literacy and numeracy coaches, and assistant teachers. School Principals make submissions on data, attendance, and behaviour and meet regularly with SSIOs. However, the support provided by SSIOs does not appear to be based on need, as all schools have the same number of meetings.
- 133. As outlined earlier, each school prepares an annual Plan of Action. However, there is scope to improve these further. The OES 2018 Annual Report reported that "every primary school has a plan of action which identified key priorities for all public schools. The plans are not sufficiently adapted to address the individual improvement needs of each primary school. Most of the schools lack any

⁴⁶ Some schools had no reported cases of truancy i.e. with zero ("0") missed sessions

formal school improvement plan which would provide direction to the school and focus for future development."

134. The school improvement framework has developed over the past few years and continues to do so, and is now much more robust than previously. However, there is scope to improve it further through peer evaluation and sharing of good practice.

Recommendation 17: The Ministry of Education should develop clear strategies and policies for focusing on the areas that are known to positively affect student attainment, including teacher quality, the use of data and parental engagement.

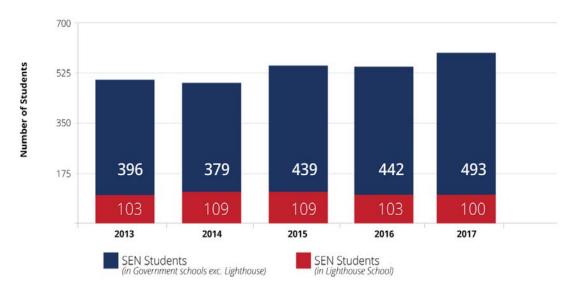
STUDENTS WITH SPECIAL EDUCATIONAL NEEDS (SEN)

135. The Government has identified special educational needs (SEN) as an area to focus on and has allocated significant funding for this over the past few years. In this section we review the number of students with SEN, their educational attainment and how the additional funding has been used.

THE NUMBER OF STUDENTS WITH SEN IN PUBLIC SCHOOLS HAS INCREASED SIGNIFICANTLY OVER THE FIVE YEARS TO 2017

136. Within the public school population there has been a significant increase in the number of students with special educational needs (SEN). As Exhibit 19 shows, by September 2017 there were 593 students with SEN in public schools (13 per cent of the total public school student population; compared to 10 per cent in 2014).⁴⁷

Exhibit 19 - Students with SEN, by type of school, 2013 to 2017



Source: 2017 Compendium of Statistics, Economic and Statistics Office, Government of the Cayman Islands (the "Government"), November 2018.

⁴⁷ Ibid

- 137. Over the five years 2013 to 2017, the number of students with SEN increased by 19 per cent from 499 to 593. MEYSAL started allocating SEN-specific funding in 2014 and the number of students with SEN in public school increased significantly in 2015. MEYSAL attributes the overall increase in the number of SEN students in public schools to the following factors:
 - Students with SEN are now identified much earlier than previously, due to the increase in SEN specialists (educational psychologists, speech and language therapists, etc.) and the use of an atrisk register.
 - The Early Intervention Program covers children at pre-compulsory school age and compulsory school age, leading to earlier identification and intervention for SEN students.
 - Staff in schools have had SEN-specific professional development, which helps them identify areas of difficulty for students and students who may require further assessment.
 - There is greater public awareness of children with SEN, due to the availability of more useful information and more resources. Stakeholders are therefore more involved and more knowledgeable, making them more aware of the services, resources, additional support, and funding available for students with SEN.
 - Parents are more proactive in seeking educational assessments and evaluations in order to receive formal diagnoses so that their children can access SEN funding to attend private schools, or overseas facilities where appropriate.
- 138. Students with SEN attend either a mainstream public school or the Lighthouse School, which is a specialist school for children with SEN. The number of students with SEN in mainstream public schools has increased from 396 in 2013 to 493 in 2017, an increase of 24 per cent. The number of students with SEN in the Lighthouse School has remained relatively constant at around 100 students, significantly higher than its planned capacity of 75 students. As a result, the Lighthouse School is facing shortages of space.

THERE IS NO NATIONAL STRATEGY FOR SEN

139. It is difficult to determine exactly when the Cayman Islands Government first identified SEN as a priority. However, our audit found that the first SEN Code of Practice for the Cayman Islands was accepted by the Education Council in 2011, and MEYSAL started tracking SEN specific expenditure in 2013-14. The SPS for 2018 and 2019 contains a specific priority for SEN to "Enhance opportunities for young people with special needs through better training of teachers and improvements in facilities." MEYSAL's Strategies Objectives for 2018 and 2019, as set in the Budget Statement, contain the objective to "Improve school climate to create safe and positive learning environments including... review and strengthen special educational needs provision, in accordance with the Cayman Islands Disabilities Legislation and Policy and other relevant legislation including the role of the special educational needs coordinators and specialist staff."

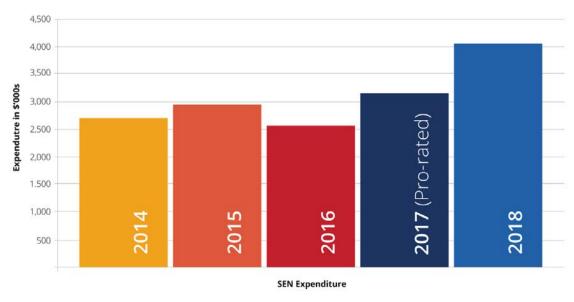
140. However, there is no national strategy for SEN that sets out how the overarching objectives for SEN will be achieved, or that can help allocate resources to focus on the right areas. The only specific document relating to SEN is the SEN Code of Practice. This is a guidance document for schools, setting out the procedures to be used in identifying and managing students with SEN, rather than showing how to provide for SEN or improve outcomes for students with SEN over the medium to longer term. There needs to be a clearer evidence base for the level, and type of investment in SEN.

INVESTMENT IN SEN HAS INCREASED SIGNIFICANTLY BUT IT IS NOT CLEAR IF THIS IS IMPROVING OUTCOMES

SPENDING ON SEN INCREASED BY 50 PER CENT BETWEEN 2014 AND 2018

141. Between 2014 and 2018 investment in SEN increased significantly - from \$2.7 million to \$4.0 million, an increase of 49 per cent (Exhibit 20). Funding for SEN increased from 3.7 per cent of total expenditure on education in 2014 to 4.7 per cent in 2018.

Exhibit 20 - SEN funding, 2014 to 2018



Source: OAG analysis of data drawn from IRIS for 2014 to 2018

THE NUMBER OF SEN-SPECIFIC STAFF INCREASED SIGNIFICANTLY OVER THE SAME PERIOD

- 142. The increase in funding has been used to significantly increase the number of staff to support students with SEN in mainstream schools. Over 2013 to 2017, the number of staff for SEN changed as follows:
 - a 26 per cent increase in SEN teachers in mainstream schools from 74 in 2015 to 93 in 2017. (2015 is the earliest year for which data is available);
 - a 45 per cent increase in school-based specialist teachers from 33 in 2013 to 48 in 2017; and
 - a 13 per cent increase in support specialists from 40 in 2013 to 45 2017.

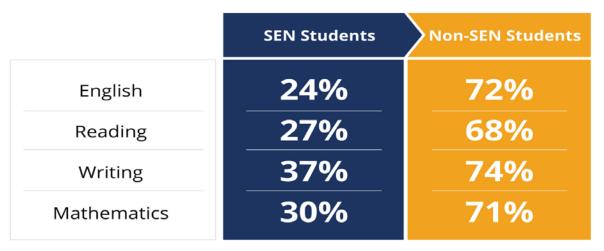
However, there was a decrease in the number of SEN staff at the Lighthouse School from 18 in 2013 to 16 in 2017.

- 143. Despite the increase in SEN-specific staffing, our analysis shows that as a result of the increase in the number of students with SEN, the student-teacher ratios (STR) in both mainstream schools and the Lighthouse School were higher:
 - The STR for SEN in mainstream schools has increased from 6:1 in 2015 to 7:1 in 2017.
 - The Lighthouse School's STR increased from 5.72:1 in 2013 to 6.25:1 in 2017.
- 144. MEYSAL has developed and uses a mathematical formula (equity staffing model) for allocating SEN staff, including teaching assistants, to schools. However, the model appears to be based solely on the number of SEN students in each school. That is a school with 1 to 10 students with SEN receives 1 additional staff member and a school with 11 to 20 students receives 2 staff members. There does not appear to be any correlation or consideration of attainment levels or the level of need according to the three stage process for identifying and assessing SEN students.

STUDENTS WITH SEN ACHIEVE MUCH LOWER LEVELS OF EDUCATIONAL ATTAINMENT

145. Our analysis shows that there are significant differences in attainment of primary school students with SEN compared to non-SEN students at the end of Key Stage 2. Exhibit 21 shows that in 2018 students with SEN performed significantly worse than non-SEN students in all four subjects.

Exhibit 21 - SEN vs. non-SEN primary school students achieving Level 4 or higher at Key Stage 2 (2018)

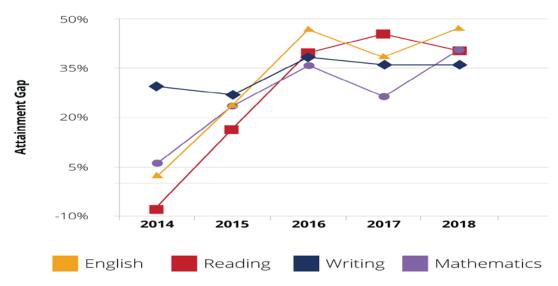


Source: OAG analysis of Key Stage 2 Results data provided by DES

Note: Cohort size was 285 non-SEN students and 83 SEN students

146. Our analysis also shows that the performance gap is widening over time. Over the period, non-SEN students improved their performance in all subjects except Reading while SEN students' performance declined in all subjects except Writing. Exhibit 22 shows that between 2014 and 2018 the attainment gap between non-SEN and SEN primary school students widened in all subjects; for example, the attainment gap in Mathematics increased from 6 per cent to 41 per cent over the period.

Exhibit 22 - Percentage point gap in attainment between non-SEN and SEN primary school students achieving Level 4 or higher in Writing, Reading, English and Mathematics (2014 to 2018)



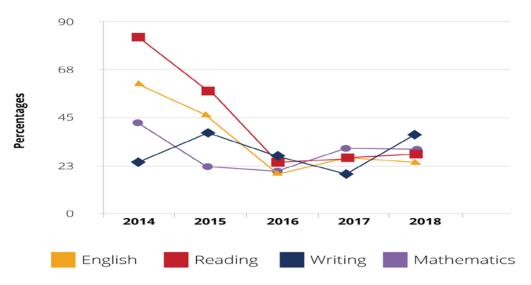
Source: OAG analysis of Key Stage 2 results data provided by DES

- 147. There are also significant differences at secondary school level in attainment between students with SEN and non-SEN students. Our analysis shows the following for 2018:
 - 25.2 per cent of SEN students achieved 5+ Level 2 passes, including English and Mathematics compared to 68.4 per cent of non-SEN students.
 - Between Year 11 and Year 12, non-SEN students generally improved their attainment at a greater rate than SEN students.
 - The largest gains for SEN students were in the percentage achieving Level 2 English and Mathematics and achieving 5+ L1 subjects. The gains made by SEN students in these areas were greater than gains by non-SEN students.

THE PERFORMANCE OF PRIMARY SCHOOL STUDENTS WITH SEN HAS WORSENED

148. Over the five years 2014 to 2018, attainment by primary school students with SEN declined in all subjects except Writing (Exhibit 23). There were significant reductions in Reading (66.7 per cent) and English (60.6 per cent).

Exhibit 23 - Per cent of students achieving L4 or higher at Key Stage 2, 2014-2018



Source: OAG analysis of Key Stage 2 Results provided by DES

THE PERFORMANCE OF SECONDARY SCHOOL STUDENTS WITH SEN HAS IMPROVED

149. However, attainment of Year 12 students with SEN improved between 2014 and 2018 (Exhibit 24). The percentage of students achieving 5+ Level 2 passes (excluding English and Mathematics) increased from 11.6 per cent in 2014 to 44.3 per cent in 2018. The percentage of Year 12 students achieving 5+ Level 2 passes (including English and Mathematics) increased from 11.6 per cent in 2014 to 25.2 per cent in 2018.

38 25 13 0 2014 2015 2016 2017 2018

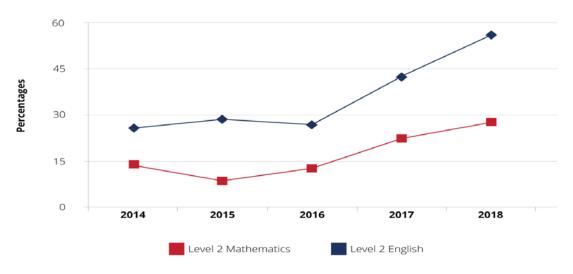
Exhibit 24 - Secondary school attainment of Level 2 passes by students with SEN, 2014-2018

Source: OAG analysis of Year 12 Results provided by DES

% 5+ Level 2 Passes % 7+ Level 2 Passes

150. Further analysis shows that the performance of secondary school students with SEN is improving in English and Mathematics. Exhibit 25 shows that the percentage of students achieving Level 2 Mathematics almost doubled from 14.0 per cent in 2014 to 27.5 per cent in 2018. The percentage of students achieving Level 2 English also more than doubled over the same five-year period, rising from 25.6 per cent to 55.7 per cent.

Exhibit 25 – Secondary school attainment for Level 2 English and Mathematics by students with SEN, 2014–2018



Source: OAG analysis of Year 12 Results provided by DES

% 5+ Level 2 (including English & Mathematics)

- 151. Neither MEYSAL nor DES has a formal framework to assess the outcome of the increased investment in SEN. Schools regularly monitor the progress of individual students with SEN. However, DES has not evaluated how, or whether, the increase in funding has contributed to any improvements in attainment levels for students with SEN.
- 152. Our audit also found that MEYSAL does not record how much of the funding is spent at primary and secondary school level. As a result, it is not possible to determine if there is any relationship between the funding allocation and changes in the performance of SEN students at primary and secondary school level from 2014 to 2018 or whether this additional funding has provided value for money.

Recommendation 18: The Ministry of Education should develop a national strategy for students with Special Educational Needs (SEN) that clearly sets out what it trying to achieve. The strategy should include a framework for measuring, assessing and reporting how the investment in SEN is contributing to improved outcomes such as the attainment performance of SEN students; and determining how SEN funding is targeted at primary and secondary levels.

CONCLUSION

- 153. The Government has identified education as a priority and one of its strategic broad outcomes is "the best education opportunities for all our children". It is important therefore that the money that the Government is investing in education is making a difference and achieving the educational outcomes necessary to benefit students and the economy in the longer term.
- 154. Despite education being a priority area and some medium- to long-term planning being done by the Ministry of Education there is no overarching strategic plan that sets out the goals, objectives and success measures. Although performance measures are set for education as part of the budgeting process these are mostly measuring inputs (such as the number of teachers) and outputs (number of tests) rather than outcomes that will help make a difference to students' lives. We found that there was limited understanding between the use of resources and performance. For example, one of the measures specified for education is a relatively low student-to-teacher ratio in Cayman Islands schools but international research shows that this is not an indicator of educational attainment. It is important that good success measures and outcomes are set for education to ensure that success can be measured and money is being spent on the things that will make a difference.
- 155. The Ministry of Education collates and publishes a range of education data annually, including attainment levels. Although the annual report provides good high-level performance information on education there is scope to improve this as it does not provide any detailed information by school, has no benchmarking information to compare regionally or internationally, and it is not always published in a timely manner.
- 156. It is encouraging to see that overall student performance has improved over the five years 2014 to 2018. However, it is worrying that there continues to be considerable variation across years and significant levels of under-performance. Students at both primary and secondary schools are underperforming against the expected levels to be attained. There are also significant gender gaps at both primary and secondary schools. Both of these issues need to be addressed if the strategic outcome is to be achieved.
- 157. We found that despite investment in special educational needs (SEN) increasing significantly between 2014 and 2018 it is not clear if it is improving outcomes for students with SEN. The Government has increased the number of specialist staff but the performance of students with SEN continues to be mixed. Over the same period, the performance of primary school students with SEN has actually worsened while the performance of secondary school students with SEN has improved. I would suggest that the Ministry needs to review how it is using its specialist SEN resources and determine whether it is making a difference or whether it should target its resources differently.

Malejory

Sue Winspear, CPFA Auditor General George Town, Grand Cayman Cayman Islands

4 October 2019

APPENDIX 1 – ABOUT THE AUDIT

OBJECTIVE

- 1. The objective of the audit was to determine how efficiently and effectively the Ministry of Education, Youth, Sports Agriculture and Lands (MEYSAL) is using its resources to maximize student achievement. We aimed to answer the following audit questions:
 - Does the Government have a clear strategic direction for improving the performance of the school education system?
 - How efficiently and effectively is MEYSAL using its resources to maximize student achievement?
 - How efficiently and effectively is MEYSAL improving student achievement?

CRITERIA

- 2. Audit criteria set out the expectations, or standards, against which an audit can assess observed performance in order to develop findings, make recommendations as appropriate, and conclude on audit objectives. The criteria below were shared with the MEYSAL at the conclusion of the planning phase of the audit.
 - A clear vision and strategy for improving the performance of the school education system exists.
 - Key stakeholders are involved in developing the vision and strategy for school education.
 - Actual performance against the vision and strategy for school education is monitored and reported.
 - There are clear and up-to-date governance, decision-making and scrutiny arrangements in place.
 - There is effective student projection planning.
 - The education funding system is clear and robust.
 - Financial resources are being used efficiently and effectively to improve student achievement.
 - Benchmarking is used to inform planning.
 - There is a clear rationale and set of aims for MEYSAL funding for private schools.
 - There is a clear rationale and set of aims for scholarship funding.
 - There are robust medium and long-term financial strategies in place.
 - There is effective short-, medium-, and long-term workforce planning.
 - There is effective estate planning and management in place.
 - There are effective measures of student achievement in place.
 - Data is used effectively to monitor and drive improvements in student achievement.
 - Attainment levels are improving among all student groups.
 - There are clear evidence-based improvement strategies and plans in place.
 - The destinations of students after Year 11 are known.

- Destination data is used to inform, improvement strategies and curriculum development.
- DES and MEYSAL routinely seek and use feedback from key stakeholders.
- There is a clear national strategy for SEN.
- There is a robust framework in place to assess and report progress.
- There is a clear rationale and set of aims for the introduction of Year 12.

AUDIT SCOPE AND APPROACH

- 3. The audit focused on MEYSAL, including the Department of Education Services (DES), and all public schools. The audit also looked at the role of key stakeholders, such as the Education Council. The audit also covered government funding provided to private schools and scholarship funding. We focused on the five years 2014 to 2018; however, for some data we used the latest published as at August 2019, which covered the five years 2013 to 2017. We included information from other relevant performance audits.
- 4. The audit did not include:
 - the role of the Office of Education Standards
 - the early years sector
 - the appropriateness of the national curriculum
 - progress against improving the school estate
- 5. The audit was conducted in accordance with International Standards on Assurance Engagements. The approach to the audit included:
 - obtaining the agreement of relevant Government officials to the audit criteria;
 - researching processes to gain a full understanding of activities;
 - interviewing key officials and staff in MEYSAL, DES, OES, the Education Council, school staff and some private school Principals;
 - reviewing documents, such as education legislation; key strategies and plans; performance management documents; and funding allocation, monitoring and reporting arrangements;
 - analysing a range of data, both local and international, including expenditure on education and SEN, staffing levels; and student attainment;
 - analysing audit evidence and assessing against agreed criteria to develop findings,
 recommendations and a conclusion on the audit objective;
 - providing a draft report to relevant Government officials for review of factual accuracy and obtaining responses to the report's recommendations (see Appendix 3);
 - presenting a final report of the audit to the Legislative Assembly.

AUDIT STAFF

6. The audit was carried out under the direction of Angela Cullen, Director of Performance Audit, assisted by Adrian Murenzi (Audit Project Leader), Erin McLean (Audit Trainee) and Kirsty Whyte (secondee from Audit Scotland).

APPENDIX 2 – SUMMARY INFORMATION ON PUBLIC SCHOOLS FOR 2018

	LOCATION	NO. OF STUDENTS	EXPENDITURE (UNAUDITED)	STR	COST PER STUDENT	AVERAGE NO. OF MISSED SESSIONS PER STUDENT	% OF STUDENTS ACHIEVING THE EXPECTED LEVEL
OTHER							
Lighthouse School	Grand Cayman	108	3,334,720	5.4	30,877	4	N/A
SECONDARY SCHOOLS							
Layman E. Scott Sr. High School	Cayman Brac	129	2,536,656	5.9	19,664	0	48
Clifton Hunter High School	Grand Cayman	798	9,801,124	12.1	12,282	6	39
John Gray High School	Grand Cayman	1,020	10,279,855	10.8	10,078	19	34
PRIMARY SCHOOLS							
Little Cayman Education Services	Little Cayman	2	103,174	2.0	51,587	2	100
West End Primary School	Cayman Brac	70	986,805	8.4	14,097	3	63
Edna M Moyle Primary School	Grand Cayman	87	1,141,519	9.4	13,121	10	42
Creek and Spot Bay Junior School	Cayman Brac	81	1,190,653	10.7	14,699	0	44
East End Primary School	Grand Cayman	89	1,111,465	9.9	12,488	0	23
George Town Primary School	Grand Cayman	266	2,382,787	14.1	8,958	2	42
Bodden Town Primary School	Grand Cayman	265	1,870,688	15.6	7,059	0	36
Prospect Primary School	Grand Cayman	349	2,458,394	17.2	7,044	0	77
Sir John A. Cumber Primary School	Grand Cayman	524	4,127,501	15.0	7,877	7	24
Red Bay Primary School	Grand Cayman	436	2,701,796	17.8	6,197	1	46
Savannah Primary School	Grand Cayman	465	3,027,944	18.3	6,512	7	49

Source: OAG analysis of data provided by DES

APPENDIX 3 – RECOMMENDATIONS

Re	commendation	Management Response	Responsibility	Date of planned implementation
1.	The Ministry of Education should monitor and publicly report, at least annually, progress against the broad outcomes and priorities set out in the Strategic Policy Statements.	Recommendation accepted. Currently the Ministry monitors progress of the Broad Outcomes and priorities/objectives through monthly reporting from each of the Departments under the Ministry. Head of Departments (HoD) outline progress towards accomplishing each of the Strategic Objectives on a monthly basis. This progress is then discussed further at regular management meetings that include the Minister, Chief Officer, Deputy Chief Officers, and all HoDs. The Ministry will collaborate with HoDs to strengthen the monitoring framework even further. The Annual Report for the Ministry will be amended to include this format of reporting which will be made available on the Ministry website.	The Ministry of Education	In progress
2.	The Ministry of Education should publish the Education Data Report on a timely basis, ideally by December of the same year of sitting exams.	Recommendation accepted. The Education Data Report will be published by the end of December on an annual basis for government schools.	Director of the Department of Education Services	December, 2019
3.	The Ministry of Education should develop a new medium- to long-term education strategy. The Ministry should regularly assess and publicly report progress against the strategy.	Recommendation accepted. The Ministry sees the importance of a strategic plan for education and previously drafted the process for developing a new strategic plan for the start of 2018. The Ministry will liaise with the Minister and Education Council on the development of a	The Ministry of Education	Resume planning an education strategy in October, 2019

Re	commendation	Management Response	Responsibility	Date of planned implementation
		medium to long term strategy. The strategy will be linked to the 2020 Strategic Policy Statement. Regular monitoring and reporting will be included as a part of the strategy.		
4.	The Ministry of Education should include private school student numbers in its student projection planning. The projection planning should be used to inform other medium- to long-term plans.	Recommendation accepted. Currently the Ministry collects and analyses data from private schools through the grant process. This includes data on enrolment, gender, age, nationality to name a few. The Ministry will review its processes for private school data collection and analysis to strengthen student projection planning. This data will then be utilised to inform overall medium to long term planning.	The Ministry of Education	Review of process around private school data collection and analysis began in August, 2019
5.	The Ministry of Education should develop a long-term financial plan that is underpinned by the Capital Projects Master Plan, student population projects and workforce plans, and that supports the delivery of the education strategy.	Recommendation accepted. The Ministry views this as an essential foundation for the development of a strategic plan for education. Whilst much of this data is currently collated and analysed by the Ministry a more comprehensive data collection and analysis process can be developed for financial planning.	The Ministry of Education	Resume planning an education strategy in October, 2019
6.	The Ministry of Education and Department of Education Services should ensure that there is effective engagement with all stakeholders in the development of strategies, and that policies and changes are communicated well in advance of implementation dates.	Recommendation accepted. The Ministry will continue to prioritise stakeholder engagement and effective communication. There is currently a process for consultation/communication that is utilised in the Ministry when new initiatives are introduced however, the Ministry will review work to strengthen this process.	The Ministry of Education and the Department of Education Services	Immediately

Re	commendation	Management Response	Responsibility	Date of planned implementation
7.	The Scholarships Secretariat should start to collect, analyse and report information on all scholarships annually to better demonstrate how scholarship funding is achieving its intended purpose and contributing to economic priorities. The data collected should include the subjects and courses funded and the destinations of scholarship recipients.	Recommendation accepted. Currently, the scholarships database includes information on all scholarships awarded annual, majors and destinations/countries and institutions of study. This information is provided to ESO and other interested parties upon request. What is currently not available is the follow-up post qualifications. It is the plan for the Scholarship Secretariat to improve student tracking, upon their completion of their studies, to determine if they are finding employment in the areas of major, if the education received compliments the professional requirements and also to record feedback on the experiences at the various institutions of learning.	Scholarship Secretariat	Process to begin in January, 2020
8.	The Government should identify and implement strategies to encourage beneficiaries to undertake courses that are aligned to current and projected work permit needs.	Recommendation accepted. This recommendation requires collaboration/information from a range of agencies including but not limited to WORC, the Education Council and Immigration.	Scholarship Secretariat	Process to begin in January, 2020
9.	The Ministry of Education should develop a national strategy for Technical and Vocational Education and Training (TVET) that takes into account the Government's economic priorities and the current and future needs of employers.	Recommendation accepted. The Ministry and the Department of Education Services currently plans for TVET as outlined in the annual Plan of Action documents prepared by each school. The high schools and CIFEC also offer a range of TVET programmes including class, apprenticeships and internships. The Ministry would include TVET as a focus area in the broader education strategy to help to ensure	The Ministry of Education	Process to begin in January, 2020

Recommendation	Management Response	Responsibility	Date of planned implementation
	TVET forms part of compulsory education. A specific TVET strategy will also be developed.		
10. The Ministry of Education should develop and document a clear rationale for the provision of funding to private schools that clearly specifies the purpose of the funding and the outcomes the Ministry expects to be delivered.	Recommendation accepted. The current funding model for private schools is a historical one. The Ministry is currently reviewing the funding model for private schools.	The Ministry of Education	Process began in September, 2019
11. The Ministry of Education should ensure that it takes corrective action, where monitoring identifies a lack of compliance by private schools against the terms and conditions specified in the Purchase Agreements.	Currently the Ministry does not release funding unless there is compliance. The Ministry is also currently reviewing the funding model for private schools.	The Ministry of Education	Process began in September, 2019
12. The Government should specify clear outcomes and success measures for education as part of the budgeting process, and should ensure that performance against these is monitored and publicly reported.	Recommendation accepted. The Ministry currently collects a range of data and can work to strengthen the collation and analysis process in order to better ascertain value for money for both public and private schools. This process should include collation and analysis of data including, but not limited to, cost per student, student/teacher ratios, number of students with special educational needs and/or disabilities (SEND), cost of provision/resources for students with SEND, before and after-school school care, transportation, and medical/therapeutic costs. The analysis will also include links to student performance where applicable. From this process	The Ministry of Education	Process to begin in February, 2020

Recommendation	Management Response	Responsibility	Date of planned implementation
	outcomes and success measures can be developed, monitored and publicly reported.		
13. The Ministry of Education should calculate, analyse and review the cost per student across all public schools on a regular basis. It should benchmark these costs with the private schools and with comparable countries regionally or internationally in order to inform decision making.	Recommendation accepted. Management response as above (#12) with comparison to regional and international costs. The Ministry views this as particularly important as the cost per student for Government students is higher than that of private school students. This analysis will be able to identify the reasons for the difference in costs which will include the fact that public schools have the majority of students with special education needs and/or disabilities (not only in Lighthouse school but in all schools) and therefore spends a significant amount on provision and resources to meet these needs. Government also spends considerably more on therapeutic/medical services for students, transportation and before/after school care to name a few. If possible, broader impacts of Government funding should be analysed for example, the Government provides bus transport for approximately 5,000+ students in public schools, whilst the majority of private schools do not utilise bus services for the 4,000+ students. The cost of additional traffic, impact on the environment, etc. should be considered.	The Ministry of Education	Process to begin in February, 2020

Recommendation	Management Response	Responsibility	Date of planned implementation
14. The Ministry of Education and Department of Education Services should develop strategies to improve education attainment at all levels. These should include closing gaps in attainment and between genders by improving the attainment of lower-performing students while continuing to motivate higher-performing students to do even better.	Recommendation accepted. One of the main focuses of the Ministry of Education and the Department of Education Services has been to improve student performance (progress & achievement) including our most vulnerable students as well as our higher-performing students. Strategies utilised thus far include but are not limited to: Standardizing assessment types and procedures across all government schools Developing, in collaboration with school principals and staff, plan of actions that focus on literacy, numeracy, science, SEND, data, and TVET Reviewing data with each individual school, each term to identify issues with performance and implement strategies for student improvement – this includes a cross analysis of teachers performance management scores and class performance Regular monitoring of the plan of action for each school Introduction of literacy interventions eg. Reading Recovery Introduction of numeracy interventions eg. Mathematics Recovery Increasing specialist and support staff to assist students with SEND Ensuring all primary schools have a Special Education Needs Coordinator (SENCo) Ensuring students have access to a range of	The Ministry of Education and Department of Education Services	Immediately

Recommendation	Management Response	Responsibility	Date of planned implementation
	enrichment programmes to help support the development of whole child, such as, flight clubs, robotic clubs, culinary programmes, music programmes, sports programmes, and cultural programmes The Ministry will continue to build on the initiatives implemented to improve student progress and achievement and will seek to provide further research based initiatives that target the specific needs to students in public schools.		
15. The Ministry of Education and Department of Education Services should systematically benchmark student performance internationally and publicly report the results.	Recommendation accepted. The Ministry has introduced the National Curriculum for England (with slight modifications) in all government primary schools for September, 2019. Assessments and data tracking systems will also be UK based making comparisons more accurate.	Ministry of Education and Department of Education Services	September 2019
16. The Department of Education Services should develop and implement a policy on reducing truancy rates. The policy should specify strategies for targeting the efforts of truancy officers to schools with the highest truancy rates; and ensure that sufficient resources are available to effectively manage and reduce truancy levels.	Recommendation accepted. Student attendance data for government schools is currently monitored by the Ministry and the Department of Education Services. A truancy policy will be developed.	Department of Education Services	Policy development process to begin in October, 2019

	Decemmendation accepted		implementation
clear strategies and policies for focusing on the areas that are known to positively affect student attainment, including teacher quality, the use of data and parental engagement.	Recommendation accepted. One of the main focuses of the Ministry of Education and the Department of Education Services has been to improve student performance (progress & achievement), especially for our most vulnerable students. The Ministry has provided a range of professional development training opportunities (mandatory and optional) for education staff (including principals, teachers and support staff) that is specifically focused on improving teacher pedagogy and raising student attainment. The Ministry has also focused on strategies linked to the 2008 meta-study by John Hattie (Visible Learning) which looks at the effect size of a range of factors that influence learning outcomes in schools. The Ministry and the Department of Education Services have focused on strategies that have the most impact on student progress and achievement. Termly reviews of individual student data, class data, school data and performance management score have led to the implementation of a range of improvement measures being implemented in schools, by the Department and Ministry.	Ministry of Education	Immediately

Recommendation	Management Response	Responsibility	Date of planned implementation
	be done to document all the improvement strategies that are in place whilst considering the balance between being inundated with paper work and providing sufficient evidence of the strategies. The Ministry will continue to build on the initiatives implemented to improve student progress and achievement and will seek to provide further research based initiatives that target the specific needs of students in public schools.		
18. The Ministry of Education should develop a national strategy for students with Special Educational Needs (SEN) that clearly sets out what it trying to achieve. The strategy should include a framework for measuring, assessing and reporting how the investment in SEN is contributing to improved outcomes such as the attainment performance of SEN students; and determining how SEN funding is targeted at primary and secondary levels.	Recommendation accepted. The Ministry and the Department of Education Services currently plans for SEND provision as outlined in the annual Plan of Action documents prepared by each school. The Ministry would include SEND as a focus area in the broader education strategy. A specific SEND strategy will also be developed. This is of particular importance as public schools have higher numbers of students with SEND than private schools and over the past few years there has been an increase in resources and provision to support students with SEND.	Ministry of Education	Enhanced data collection process began in August, 2019 to include data from private schools. Process for the development of an SEND strategy to begin in January, 2020

Contact us

Physical Address:
3rd Floor Anderson Square
64 Shedden Road, George Town Grand Cayman

Business hours: 8:30am - 5:00pm

Mailing Address:
Office of the Auditor General
P. O. Box 2583 Grand Cayman KY1–1103
CAYMAN ISLANDS

Email: auditorgeneral@oag.gov.ky T: (345) 244 3211 Fax: (345) 945 7738

Complaints

To make a complaint about one of the organisations we audit or about the OAG itself, please contact **Katrina Thomas** at our address, telephone or fax number or alternatively **katrina.thomas@oag.gov.ky**

Freedom of Informa on

For freedom of information requests please contact **Katrina Thomas** at our address, telephone or fax number. Or alternatively **foi.aud@gov.ky**

Media enquiries

For enquiries from journalists please contact **Angela Cullen** (345) 244 3220 or **angela.cullen@oag.gov.ky**

