## Data Report <br> for the Academic Year 2022-23

## Department of Education Services <br> Ministry of Education

Cayman Islands Government

This Data Report consists of enrolment data for both government and private schools as well as attendance and achievement data for government schools only.

## Introduction

The compulsory education system in the Cayman Islands is organised into primary and secondary levels, characterised by specific year groups and Key Stages (KS), as outlined in Table 1.

The terms "Nursery" and "Reception" denote the classes attended by a child in the two years and year respectively, immediately preceding the child reaching the age at which school attendance becomes compulsory. While Nursery and Reception are regarded as integral stages within the educational framework, they are currently not part of the compulsory education mandate. Table 1 includes information about these phases for comprehensive coverage of the public education provision.

It should be noted that at this time, all Government primary provisions have a Reception class, and Nursery classes in Government Primary Schools are currently found at Creek Primary (the infant provision of Creek and Spot Bay Primary School) in Cayman Brac, and East End Primary in Grand Cayman. It should be further noted that the East End provision commenced in the 2023-24 academic year and as such, would not be included in this report.

Table 1: The Organisation of the CI Compulsory Education System

| Early Years Provision |  | Primary Provision |  |  |  |  |  | Secondary Provision |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Key Stage 1 |  | Key Stage 2 |  |  |  | Key Stage 3 |  |  | Key Stage 4 |  |  |
| Nursery | Reception | Year | Year | Year | Year <br> 4 | Year | Year | Year | Year | Year 9 | Year 10 | Year 11 | Year 12 |
| 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-1 |

The information presented in this report serves as a foundation for well-informed decision-making by education authorities and policymakers. Specifically, it offers valuable insights into the present condition of education in public schools. The analyses encompass discussions on enrollment trends, a comparative examination of private and public enrollment provisions, and an assessment of performance trends within the public education system.

## Enrolment Data

The enrolment data outlined as part of this report was sourced from all government and private schools in the Cayman Islands including centres providing early childhood care and education.

## Early Childhood Care and Education (ECCE)

ECCE provision is categorised as:

- ECCE Private Centres: Centres owned by private individuals/companies who provide care and education services for children younger than compulsory school age.
- ECCE Settings in Private Schools: Services/programmes for children younger than compulsory school age which are attached or affiliated with registered private schools.
- ECCE Settings in Public Schools: Services/programmes for children younger than compulsory school age which are attached to or affiliated with Government schools (i.e. Nursery and Reception programmes).

The private sector manages their ECCE provision, while the government provides the oversight and the regulatory framework. ECCE programmes in Government settings are managed by the school or centre at which they are delivered.

Figure 1: ECCE Enrolment by gender

In 2022-23 academic year, there were 2,056 children enrolled in ECCE Centres across the Cayman Islands, with a gender distribution of $48.6 \%$ females to $51.4 \%$ males (See Figure 1)

Generally, enrolment at ECCE Centres experienced a 2.5 percentage point (pp) increase compared to the 2021-22 figures detailed as follows: private centres reflected a modest 2\% increase; government schools experienced a $1 \%$ uptick.

The distribution by sector and location of the ECCE provision is illustrated in the charts in Figure 2. Chart A
 represents the percentage distribution between private and public provisions. The chart indicates that $85 \%$ of the 2022-
23 ECCE provision was serviced by the private sector, and $15 \%$ by the Government sector.
Chart B shows the distribution of ECCE centres over the various districts in the Cayman Islands. Indications are that most of the ECCE Centres ( $80 \%$ ) are concentrated in the district of George Town.

Appendix A provides a detailed presentation of ECCE provision by centre type and district.

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Figure 2
ECCE Enrolment Distribution by Sector and Location


## Primary and Secondary EnroIment

Enrolment distribution by age is given in Appendix B.
The enrolment figures and staffing ratios in primary and secondary schools are detailed in Appendix C. Across the government, private and home school sectors, a total of 9,042 students were enrolled in compulsory education in the 2022-23 academic year. This represents a small but significant increase over the 2021-22 figures of approximately 1.2 pp . The enrolment is approximately evenly distributed by gender ( $49.99 \%$ female, $50.01 \%$ male). This analysis does not include the 112 students enrolled in the special education provision at the Lighthouse School.

Of the mandatory school-age population considered, $49.9 \%$ was in primary education ( 4,515 students), and $50.1 \%$ in secondary education ( 4,527 students).

Figure 3 shows an analysis of the distribution of these populations by sector: Home school, Private school and public school. The chart illustrates that at the primary level, $48 \%$ are enrolled at private schools, $51 \%$ at public schools and $1 \%$ of the population is home schooled.

This trend is similar for the secondary level but with a slightly higher disparity between public and private sectors. That is, $58 \%$ of the population are enrolled in public education, $41 \%$ in private education and $1 \%$ home schooled.

Generally, the ratio of private and home school enrolment to public school enrolment has remained relatively stable over the last two years. That is, on average across the two years, $46 \%$ were enrolled in private and home school education and 54\% are in public education (See Figure 4).

Figure 3
School Enrolment Distribution by Sector and Location

| A | B |
| :---: | :---: |
| Primary Education Enrolment Distribution across Sectors <br> - Private schools - Government schools <br> - Homeschool | Secondary Education Enrolment Distribution across Sectors |

Figure 4
School Enrolment Distribution over a two-year Period


Other details as it relates to student enrolment data are provided in Appendix A to D.

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## Attendance Data

Mandatory attendance is a requirement for all students of compulsory school age who are legally resident in the Cayman Islands as stipulated in The Education Law, 2016 (2017, March). The law mandates 185 days of formal instruction for all schools in the Cayman Islands. Compliance with these regulations ensures that children receive the education necessary for their overall development. The data for this report is derived from the public school system.

## Overall Attendance Rate

The overall attendance rate is a crucial metric for assessing student engagement in educational activities. Research consistently supports the pivotal role and direct impact of regular attendance on academic success, demonstrating its statistically significant and quantitatively relevant influence on student learning.

Government Schools are required to take attendance registers twice daily indicating whether students are:

- Present
- Attending an approved educational activity
- Absent: unable to attend school due to exceptional circumstances; absences may be classified as either authorised or unauthorised.

For the academic year 2022-23, the overall attendance rate within the public education system was $88.4 \%$ (See Figure 5). This attendance rate while generally consistent with the overall attendance for the academic year 202122 , is significantly below the national expectation of the $95 \%$ rate defined by Office of Education Standards (OES).

Figure 5
Average Attendance for the Academic Year 2022-23


A review of the analysis by category shows that at the primary level, the average attendance was $90.4 \%$, and at the secondary level, the average attendance is listed as $86.5 \%$. If the attendance of the Cayman Islands Further Education Centre (CIFEC) was excluded from the statistics, the average attendance for secondary schools rose by approximately 3.5 pp, to $90.0 \%$

It is noteworthy that the average attendance at the primary level includes the Nursey and Reception metrics, although these groups are not considered part of compulsory education. Inclusion of these year groups does not significantly impact the overall attendance however.

At the national level, excluding CIFEC, the attendance graph exhibits a significant uptrend, averaging $90.2 \%$ over the analysed period. This modest but noteworthy improvement is reflected in the national attendance metrics when CIFEC is omitted from consideration. Over the past seven years, a decline in overall attendance is apparent (See Figure 6). This decline is particularly pronounced over the last three years, underscoring the lingering effects of the COVID-19 pandemic and subsequent respiratory illnesses. The chart highlights the fact that attendance at the primary and secondary levels (excluding the impact of the CIFEC attendance on secondary attendance figures) has remained relatively flat over the last two years averaging $90 \%$ and $90.2 \%$ respectively.

Figure 6
Attendance trends over the period 2016-17 to 2022-23

| Average Attendance Rates over a 7 Year Period (By Category) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | $92$ |  |
| $\underset{\sim}{\varnothing} \quad 90$ |  |  |  |  |  |  |  |
| $88$ |  |  |  |  |  |  |  |
| $86$ |  |  |  |  |  |  |  |
| 84 |  |  |  |  |  |  |  |
| 82 |  |  |  |  |  |  |  |
| 80 |  |  |  |  |  |  |  |
|  | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
| $\longrightarrow$ Primary | 94.0 | 94.0 | 94.0 | 94.0 | 95.4 | 90.6 | 90.8 |
| $\simeq$ Secondary (Including CIFEC) | 88.0 | 89.0 | 93.0 | 90.0 | 90.5 | 87.3 | 86.6 |
| - Secondary (Excluding CIFEC) | 92.0 | 93.0 | 97.0 | 94.0 | 94.1 | 90.4 | 90.0 |
| $\cdots$ National (excluding CIFEC) | 93.0 | 93.5 | 95.5 | 94.0 | 94.8 | 90.0 | 90.2 |
| $\cdots$ National (including CIFEC) | 91.0 | 91.5 | 93.5 | 92.0 | 93.0 | 88.9 | 88.4 |

Further analyses of attendance data by schools are provided in Appendix E.

## Attainment Data

For the purposes of this report, attainment and progress are discussed in terms of the defined national expectations at the end of Key Stage 2 (Year 6) and Key Stage 4 (Years 11 and 12).

## End of Key Stage 2 (Year 6) Assessment

The assessment model for end of Key Stage 2 (KS2) defines attainment in terms of a scaled score which ranges from 80 to 120.

Students are tested in the areas of English reading, English grammar, punctuation and spelling, and in mathematics. To be awarded a scaled score, students must take each test paper for the subject. The results obtained are reported to schools as:

- a raw score
- a scaled score (except where students have too few marks to be awarded the lowest scaled score -3 or lower)
- either 'NS' (expected standard not achieved) or 'AS' (expected standard achieved)

A scaled score is a best practice representation of a transformed raw score - the total number of correct responses provided by a candidate in the end of KS2 test, which has been adjusted or converted to a common scale to facilitate comparison across different versions or forms of the test. While the KS2 tests are developed to the same specification each year, the use of a scaled score accounts for the potential differences in difficulty across test forms and facilitates accurate comparisons of performance over time.

Scaled scores are interpreted as follows: 100 or more indicates that the student has met or exceeded the agerelated expected standard; 99 or less means that the student has not met the expected standard in the test. Students achieving a scaled score of 110 or higher are deemed to be 'working at greater depth', or 'meeting the higher standard'.

Students are also assessed in writing. Assessment of 'writing proficiency' relies on teacher evaluations, referred to as Teacher Judgements. It draws upon a diverse array of classroom evidence such as the analysis of students' work in their notebooks, the outcomes of class tests and published assessments, ongoing meticulous marking, and recorded observations of students' work in terms of its alignment with the defined teacher assessment frameworks.

To ensure objectivity and reliability, Teacher Judgements undergo external moderation and quality assurance. Trained Moderators, possessing comprehensive knowledge and insight with respect to the assessment frameworks as well as a proven track record of recognising the expected standard, review and validate the accuracy of the writing assessment outcomes. A grade of 'expected standard' is considered the minimum requirement for students to independently navigate the primary and secondary education provision successfully.

## End of KS2 Performance Data

The KS2 Standard Assessment Tests (SATS) were administered during the report period for the second time since the implementation of the new curriculum in August 2019. A summary of the results is shown in Figure 7.
Results indicate that:
$59 \%$ of the cohort achieved the expected standard in grammar, punctuation, and spelling.
$43 \%$ of the cohort achieved the expected standard in reading.
$41 \%$ of the cohort achieved the expected standard in mathematics.
$46 \%$ of the cohort achieved the expected standard in writing (Teacher assessed and externally moderated);
$26 \%$ of the cohort achieved the expected standard in reading, writing and mathematics.

Figure 7
Year 6 Attainment: Based on end of year school-based attainment tests


Figure 8 presents a comparison of performance results from the previous year. The chart highlights minor fluctuations in performance across various subject areas, but the overall variance remains relatively stable.

Figure 8
Year 6 performance two-year comparison


Figure 9 presents a comparison of KS2 performance based on gender. The data reveals that, on average, girls outperformed boys by on average 16 percentage points (pp), with the most significant difference observed in writing (27pp). While fluctuations are evident across different subject areas, this pattern aligns with global assessment trends indicating that, on average, girls tend to outperform boys in specific academic domains, notably in reading and writing.

Figure 9
Year 6 performance indicators by gender

KS2 Performance by Gender


## KS2 Prior Attainment Metrics

"Prior attainment metrics" refers to the quantitative measures or indicators used to assess a student's academic achievements, skills, or knowledge before entering a particular educational level or program. These metrics provide insights into a student's academic history and can be valuable in understanding students' baseline knowledge and skills as they progress through their education.

Cognitive Abilities Test Fourth Edition (CAT4): The CAT4 is employed as a valuable set of prior attainment metrics. The metrics, derived from CAT4 assessments, provide a detailed overview of a student's cognitive abilities and serve as a baseline measure of their academic potential.

CAT4's four batteries - Verbal Reasoning, Quantitative (or Numerical) Reasoning, Non-verbal Reasoning, and Spatial Ability - offer a comprehensive evaluation of a student's cognitive skills and provide a basis for an understanding of a student's strengths, weaknesses, and preferred learning style. The population distribution for the CAT4 test is a 'normal' bell curve with a mean score of 100.

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Progress Tests: Hodder Assessments: The system also uses a set of Rising Stars (RS) standardised progress tests, namely progress in reading assessment (PiRA), progress in understanding mathematics (PUMA), and progress in grammar, punctuation and spelling (GAPS), to track student attainment and progress. Standardised assessments refer to tests or exams that are administered and scored in a consistent and predetermined manner. These assessments are designed to measure a student's knowledge, skills, abilities, or other characteristics in a uniform way so that results can be compared across individuals or groups with consistency, reliability, and validity.

When the KS2 data is compared against both CAT4 predictors and Rising Stars estimates for this cohort, students fell below their predicted or estimated levels across all areas. Of note are the significant variances in reading and mathematics: 56pp and 14pp for CAT4 and RS (PiRA), respectively, in reading, and 59pp and 31pp for CAT4 and RS (PUMA), respectively, in mathematics. (See Figure 10).

Figure 10
Year 6 Attainment: Based on end of year school-based attainment tests


Further analysis of the KS2 results by school are detailed in Appendix F and G.

## Key Stage 4 (KS4)

This section of the report provides an overview of KS4 performance, detailing the outcomes based on nationally defined standards and the predominant performance trends. In particular, it summarises and describes the cumulative achievements of the cohort across the various Level 1 (L1) or Level 2 (L2) qualifications, including but not limited to the Caribbean Secondary Certificate of Education (CSEC), General Certificate of Secondary Education (GCSE), International General Certificate of Secondary Education (iGCSE), BTEC awards, IMI awards, ASDAN awards, and City \& Guilds certificates.

To facilitate a nuanced understanding, student accomplishments are systematically categorised based on the difficulty level of their qualifications. Adhering to the established convention, the interpretation of qualification levels follows the principle that higher levels indicate greater difficulty, reflecting the standards of knowledge, skills, and competencies required for each qualification.

For a detailed breakdown of the categorisation of qualifications in the Cayman Islands, refer to the Cayman Islands' National Qualification Framework (CINQF) as outlined in Appendix H. It is important to note that at KS4, students are expected to pursue Level 2 qualifications. The national expectation is that students successfully achieve a minimum of five Level 2 qualifications, including proficiency in English and mathematics, by the conclusion of KS4.

## Performance Indicators - Year 11

Figure 11 presents the cumulative key performance indicators for the 2023 Year 11 cohort. Indications are that:
79.8\% of the cohort achieved a L2 qualification in English Language;
$52.3 \%$ achieved a L2 qualification in mathematics;
$67.3 \%$ achieved a L2 qualification in science; and,
$48.5 \%$ achieved the nationally expected standard of 5 or more L2 qualifications including English and mathematics.
Figure 11
Year 11 Key Performance Indicators (2023)


The data also reveals that a significant $38.5 \%$ of the cohort surpassed the national standard, earning the distinction of being classified as an 'honours' students. These students would have achieved 7 or more subjects including English and mathematics (honours), or 9 or more subjects including English and mathematics (high honours). Of significance also is the fact that $79.3 \%$ of the students achieving the national standard (five or more subjects including English and mathematics) achieved this pivotal metric of honours student.

## Year 11 General Performance Trends

Despite a slight decline (approximately 8pp) of this metric (honours student) in 2023, the ratio of students meeting this attainment level has remained relatively stable since 2019 (See Figure 12). It should be noted that the honours student percentage represented in Figure 12, is the percentage of the students that achieved at least 5 or more subjects including English and mathematics, that actually qualified for honours designation as per the criteria set out above.

Figure 12
Percentage of students meeting the expected standard including the ratio of students achieving the standard that qualified for honours

Percentage Of Students Meeting or Exceeding National
Expectations


An analysis of the 2022 and 2023 figures, as depicted in Figure 13, highlights a significant improvement across all key performance metrics. On average, there is an increase of 10.3 pp . Specifically, the data reveals an increase in English scores by 13.7 pp, mathematics by 12.6 pp, single science by 1 pp, 5 or more Level 2 Subjects (including English and mathematics) by 11 pp, and $5+$ Level 2 Subjects by 13.3 pp.

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Figure 13
Comparison between 2022 and 2023 Year 11 Key Performance Indicators


Figure 14 provides an overview of performance trends in key areas spanning a five-year period. Analysis of these trends reveals that, excluding the assessment periods in 2020 and 2021 (the results of which were impacted by the COVID outbreak and seen as anomalies), most performance indicators have maintained a relatively stable growth trajectory over time based on the 2019 (or pre-pandemic) figures (See Appendix I). That is, a discernible marginal growth trend is observed across all indicators for the period considered.

The chart further highlights a consistent trend where attainment in English consistently surpasses that of mathematics by an average 26.4pp margin over the five-year period considered (See Figure 14).

Figure 14
Year 11 Key performance indicators (2019-2023)


Additionally, a clear correlation emerges between meeting the national expectation (five or more subjects, including English and mathematics) and success in mathematics. This implies that efforts to enhance the number of students meeting the national standard are intricately linked to the capacity to elevate standards in mathematics.

## Student Characteristics

## 1. Gender

There were 413 students in this cohort of which 228 (55.2\%) were boys and 185 (44.8\%) were girls.
Figure 15 compares the performances of boys and girls relative to their respective cohorts across the six key performance measures over time. The chart reveals that in general, girls outperform boys across all the indicators considered. English accounts for the largest average performance difference to the tune of 17.3pp. The average difference for mathematics is approximately 5.8 pp and 7.7 pp for the national expected standard.

Figure 15
Year 11 Key performance indicators by gender


## 2. Prior Attainment

Performance on the Cognitive Abilities Tests (CAT4) is used within the system to provide context surrounding overall achievement when interpreting examination results.

The population distribution for the CAT4 test is a 'normal' bell-shaped curve with a mean score of 100 . The distribution for the 2023 Year 11 cohort is illustrated in Figure 16.

Figure 16
Prior Attainment: Distribution for scores obtained in CAT4 test
Distribution of scores for all students (by battery) compared with those for the national sample


The Cognitive Abilities Tests (CAT4) play a crucial role in contextualising overall achievement when interpreting examination results within our system. The population distribution for the CAT4 test typically conforms to a 'normal' bell-shaped curve, with a mean score of 100 . This distribution for the 2023 Year 11 cohort is visually represented in Figure 16.

Examination of the test results reveals a distribution curve exhibiting positive skewness, characterised by a mean standard age score of 94 . In practical terms, the majority of scores obtained by the cohort are concentrated within the left tail, indicating a prevalence of lower scores on the scale. This departure from a perfectly symmetric (normal) distribution implies that fewer scores are observed on the higher end of the scale.

Positive skewness in the CAT4 distribution can be indicative of potential challenges within the educational environment, variations in test preparation, or other factors influencing performance. The asymmetry suggests a need for further exploration into the underlying factors contributing to the results. The information gleaned serves to provide the fodder for the development of targeted interventions and school improvement strategies.

For the purposes of this analysis, the Year 11 cohort was divided into attainment groups based on the mean CAT4 score achieved on the test. Students were grouped and their results analysed based on the attainment categories defined Table 2.

Table 2
Prior Attainment Groupings by the Mean Score Obtained in the CAT4 Test

| Group | CAT4 Mean Score | No. of Students | $\%$ of Cohort |
| :--- | :--- | :---: | :--- |
| High Attainment | Greater 105 | 60 | $15 \%$ |
| Average Attainment | From 95-105 | 122 | $31 \%$ |
| Low Attainment | Below 95 | 192 | $48 \%$ |
| No CAT 4 Score | Students who did not take the test | 26 | $7 \%$ |
| Cohort Total |  | 400 | $100 \%$ |

Attainment groups, defined in Table 2, guided the analysis of English, mathematics, and science performance. Notably, at least $46 \%$ of the cohort were projected to attain acceptable grades in all the core subject areas English, mathematics and single science. The actual results across the core subjects on average met these expectations.

In addition, English and science individually surpassed these benchmarks by 34 pp and 22pp, respectively, while math exceeded it by 6 pp. Table 3 provides a breakdown of the grades achieved in each category.

Table 3
Comparison of Cognitive Ability Indicators and Actual Performance English, mathematics and science

| Group | Other | VI (E/G) | V (E) | IV (D) | III ( C ) | II (B) | $\mathrm{I}(\mathrm{A} / \mathrm{A}+$ ) | Grand Total | Acceptable Grades (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| English |  |  |  |  |  |  |  |  |  |
| High:CAT Score greater than 105 | 2 |  |  |  | 5 | 18 | 35 | 60 | 97\% |
| Average: CAT Score between 94 and 106 | 4 |  | 1 | 6 | 21 | 49 | 41 | 122 | 91\% |
| Low: CAT Score below 95 | 6 |  | 23 | 35 | 61 | 50 | 17 | 192 | 67\% |
| No CAT Score available | 0 |  | 2 | 2 | 5 | 10 | 7 | 26 | 85\% |
| Grand Total | 12 |  | 26 | 43 | 92 | 127 | 100 | 400 | 80\% |
| Mathematics |  |  |  |  |  |  |  |  |  |
| High:CAT Score greater than 105 | 0 |  |  | 2 | 7 | 34 | 17 | 60 | 97\% |
| Average: CAT Score between 94 and 106 | 8 |  | 4 | 32 | 36 | 32 | 14 | 122 | 67\% |
| Low: CAT Score below 95 | 76 | 2 | 23 | 74 | 37 | 17 | 1 | 192 | 29\% |
| No CAT Score available | 0 |  | 6 | 6 | 5 | 7 | 2 | 26 | 54\% |
| Grand Total | 84 | 2 | 33 | 114 | 85 | 90 | 34 | 400 | 52\% |
| Science |  |  |  |  |  |  |  |  |  |
| High:CAT Score greater than 105 | 2 |  |  | 4 | 6 | 20 | 28 | 60 | 90\% |
| Average: CAT Score between 94 and 106 | 3 |  | 4 | 14 | 34 | 41 | 26 | 122 | 83\% |
| Low: CAT Score below 95 | 12 | 1 | 28 | 53 | 64 | 28 | 6 | 192 | 51\% |
| No CAT Score available | 3 |  | 2 | 4 | 8 | 6 | 3 | 26 | 65\% |
| Grand Total | 20 | 1 | 34 | 75 | 112 | 95 | 63 | 400 | 68\% |

Table 3 also depicts that following metrics:
High Category. 97\% in this category achieved acceptable grades in English, 97\% in mathematics, and 90\% in science.

Average Category. $91 \%$ of the students in this category achieved acceptable grades in English, $67 \%$ in
mathematics, and $83 \%$ in science.
Low Category. 67\% of the students in this category achieved acceptable grades in English, 29\% in mathematics, and $51 \%$ in science.

No CAT4 Score. $85 \%$ in this category achieved acceptable grades in English, $54 \%$ in mathematics, and $65 \%$ in science.

The data suggests that high and average categories perform at or above expectations in English and science; a high level of success was also achieved in mathematics for these groups as well.

## 3. Added Value Metric

The term "value-added" refers to the measurable improvement or enhancement that the educational process or institution contributes to a student's knowledge, skills, and overall development. It focuses on assessing the progress a student makes during their educational journey, taking into account their starting point and the value that the educational experience adds to their academic and personal growth.

The concept of value-added is often used to evaluate the effectiveness of schools, teachers, or educational programs. It goes beyond merely looking at standardised test scores and considers the educational impact on students over time. This approach helps identify the value that an educational entity brings to its students in terms of academic achievement and other relevant outcomes.

The scatter plots shown in Figures 17, 18 and 19 compare the value-added relative to the CAT4 mean obtained by students, for the core subjects: English mathematics and single science. The charts reveal significant value added, particularly for less capable students to achieve satisfactory grades, notably in English and science. On average, the value-added grade point scores are 1.84 and 1.2 for English and science, respectively; this translates into the education provision within schools moving students approximately one and a half to two grade points for English and one grade points above expectations for science.

While the impact in mathematics is less pronounced, there is still a positive influence exerted on overall outcomes in the amount of 0.74 , or just over half a grade point.

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Figure 17
Student Progress: Scatter Plot Chart Showing the Value Added Indicators for English


Figure 18
Student Progress: Scatter Plot Chart Showing the Value Added Indicators for Mathematics


Figure 19
Student Progress: Year 11 Scatter Plot Chart Showing the Value Added Indicators for Science


## Additional Learning Needs

Students with additional needs are identified based on the intervention strategies utilised to support their ongoing development.

P1. Teacher Action (TA) - Early Screening and Progress Monitoring: This Differentiated Instruction Plan is typically crafted by the classroom teacher.

P2. School Action (SA) - School-Based Support Team (SBST) Individual Intervention Plans: P2 mirrors P1 but incorporates changes in measurable targets, development of alternative strategies, and an increased intensity and frequency of interventions.

P3. School Action Plus (SA+) - Special Educational Needs and Disabilities (SEND) Eligibility and Learning Support Plans.

English as a Second Language (ESL): Pertains to non-native speakers of the English language.
Table 4 provides details on the number of students and the relative proportions of students achieving acceptable grades in each category. For instance, about $8.75 \%$ (35) of the Year 11 cohort required SEND+ type provision. Among these students, 29\% achieved acceptable grades in English, 17\% in mathematics, and 40\% in science.

It's crucial to highlight that schools have the authority to implement various intervention strategies aimed at fostering the continuous development and success of these students. Although the specific details of SEND needs and provisions extend beyond this report's scope, the results indicate a degree of success in these intervention programs.

Table 6
Year 11 Key performance indicators by Additional Learning Needs Categories

| Category | No Grade | VI(F/G) | V (E) | IV(D) | III (C) | II (B) | $\mathrm{I}\left(\mathrm{A} / \mathrm{A}^{*}\right)$ | Grand Total | Acceptable Grade (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| English |  |  |  |  |  |  |  |  |  |
| No SEND Need | 8 | 0 | 5 | 17 | 63 | 110 | 99 | 302 | 90\% |
| ESL | 1 |  | 4 | 2 | 2 | 4 |  | 13 | 46\% |
| TA | 1 |  | 3 | 2 | 8 | 5 |  | 19 | 68\% |
| SA | 1 | 0 | 6 | 6 | 12 | 5 | 1 | 31 | 58\% |
| SA+ | 1 |  | 8 | 16 | 7 | 3 |  | 35 | 29\% |
| Grand Total | 12 |  | 26 | 43 | 92 | 127 | 100 | 400 | 80\% |
| Mathematics |  |  |  |  |  |  |  |  |  |
| No SEND Need | 14 | 0 | 20 | 84 | 68 | 83 | 33 | 302 | 61\% |
| ESL | 3 |  | 2 | 5 | 3 |  |  | 13 | 23\% |
| TA | 4 |  | 2 | 7 | 4 | 2 |  | 19 | 32\% |
| SA | 6 | 1 | 5 | 9 | 6 | 3 | 1 | 31 | 32\% |
| SA+ | 15 | 1 | 4 | 9 | 4 | 2 |  | 35 | 17\% |
| Grand Total | 42 | 2 | 33 | 114 | 85 | 90 | 34 | 400 | 52\% |
| Science |  |  |  |  |  |  |  |  |  |
| No SEND Need | 11 | 1 | 13 | 49 | 78 | 88 | 62 | 302 | 75\% |
| ESL |  |  | 6 | 3 | 2 | 2 |  | 13 | 31\% |
| TA | 3 |  | 4 | 2 | 7 | 3 |  | 19 | 53\% |
| SA | 5 | 0 | 2 | 10 | 11 | 2 | 1 | 31 | 45\% |
| SA+ | 1 |  | 9 | 11 | 14 |  |  | 35 | 40\% |
| Grand Total | 20 | 1 | 34 | 75 | 112 | 95 | 63 | 400 | 68\% |

Other specific indicators and findings regarding the cumulative attainment and data analytics for the 2022-23 Year 11 cohort are provided in Appendix J and K .

## Year 12: Performance Metrics

The key highlights and interconnectivity among the cumulative national key performance indicators for the Year 12 cohort are illustrated in Figure 20.

Figure 20
Year 12 Cumulative Results: Key Performance Indicators


The chart illustrates that 78.6\% and 67.9\% of the cohort achieved level 2 qualifications in English and a single science, respectively. Additionally, $63.2 \%$ of the cohort obtained a qualification in mathematics, with $56.5 \%$ meeting the expected standard of 5 or more subjects including English and mathematics, and $48.9 \%$ surpassing it.

Overall, there was a positive growth trend in performance compared to the previous year across all indicators except one. There was a slight decline of 4.2 percentage points in the ' $5+$ Level subjects' category (See Figure 21).

Notably, mathematics shows the most substantial improvement, with a 15-percentage point increase over the 2022 figures. There is also an 11-percentage point rise in the number of students meeting the expected standard and a 7.8 pp increase in the number of students exceeding the national standard. This reinforces the conclusion that attainment of the national expected standard is strongly correlated with the performance in mathematics.

Figure 21
Year 12 Cumulative Results: Key Performance Indicators


As shown in Figure 22, over the past seven years, on average $72 \%$ of students have consistently reached the benchmark of ' 5 or more Level 2 qualifications.' This salient pattern reveals that, on average, $20 \%$ of each cohort excels academically but falls short of meeting the nationally defined expected standard which includes obtaining passes in English and mathematics.

Of note also is the transformation observed in the percentage of students securing a Level 2 qualification in science over period considered (See Figure 22). Despite fluctuations from the lowest point of $37 \%$ in 2016 to $79 \%$ in 2021, the trend line indicates an overarching substantial and positive improvement over time. Further, the 31percentage point difference between the initial point in 2016 and 2023 underscores commendable progress in science education within the system.

Figure 22
Year 12: Comparison of the Key National Performance Indicators over a 5-Year period


## Gender Comparisons

Figure 23 illustrates the strides made in 2023, showcasing the percentage of males and females attaining or exceeding the nationally expected standard. The chart shows that $50.8 \%$ of males and $63.8 \%$ of females reached the expected standard in 2023. This signifies a 9.7 percentage point increase for males and an even more significant 14.2 percentage point increase for females compared to the preceding year's figures.

While these statistics indicate a notable performance edge for females, they also underscore the noteworthy progress and success achieved across both gender groups. This underscores a promising trajectory of achievement and excellence (See Figure 24).

Figure 23
Year 12 Indicators: Gender performance comparisons


Figure 24
Year 12: Comparison of National performance indicators over a 7-Year period by gender


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## General Trends

The continual evidence of value added at the Year 12 level over the Year 11 results is notable, as illustrated in Figures 25 and 26. These charts reveal a noteworthy trend: an average increase of 12 percentage points annually. While the growth trajectory displays some variability, it is particularly noteworthy that both English and mathematics exhibit robust average growth rates: 9.5 and 12.0 percentage points, respectively.

This year's data reflect the significance even further; mathematics experienced a 23.5 percentage point surge and English demonstrated an equally noteworthy increase of 12.5 percentage points. Beyond these key indicators, the statistics related to ' 5 or more subjects (including English and mathematics)' and ' 7 or more subjects (including English and mathematics)' also reflect proportional increments (See Figure 26).

Figure 25
Value Added: Year 12 cumulative performance compared to the achievement at the end of Year 11 (same cohort)


Figure 25
Value Added: Year 12 cumulative performance compared to the achievement at the end of Year 11 (same cohort)


Further data analyses and comparisons related to KS4 Year 12 results are made available in Appendix L through Appendix O .

## Attainment Data Comparative Analysis

While the attainment data presented at Year 11 and Year 12 represents a cumulative value for the passes obtained in the years prior to and including that particular year, a comparison was undertaken across Cayman Islands public school results for the 2023 sitting only, and the 2023 sittings for the region for CSEC examinations and England's GCSE results. The comparison shows public schools performing on par with the region, and exceeding England in English Language; and marginally outperforming England in the area of Science.

| Year | Category | English <br> Language | Mathematics | Integrated Science (Public and Regional) <br> Single Science (England) |
| :--- | :--- | :---: | :---: | :---: |
| $\mathbf{2 0 2 3}$ | Public | 76.2 | 42.0 | 58.2 |
|  | Regional | 76.6 | 42.8 | 65.2 |
|  | England | 64.2 | 61.0 | 56.6 |

$\begin{array}{rc}\square & \text { Appendix A } \\ \text { Enrolment Data }\end{array}$
Enrolment by type of ECCE centre and district

|  | George Town | West Bay | Bodden Town | North Side | East End | Sister Islands | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Centres | 32 | 5 | 4 | 1 | 1 | 4 | 43 |
| Total Enrolment | 1643 | 152 | 164 | 5 | 12 | 80 | 2056 |
| Enrolment by setting: |  |  |  |  |  |  |  |
| ECCE private centres | 847 | 87 | 82 | - | - | 33 | 1049 |
| ECCE settings in private schools | 696 | 8 | - | - | - | - | 704 |
| ECCE settings in government schools | 100 | 57 | 82 | 5 | 12 | 47 | 303 |
| Enrolment by Gender |  |  |  |  |  |  |  |
| Girls | 854 | 74 | 83 | 1 | 8 | 36 | 1056 |
| Boys | 789 | 78 | 81 | 4 | 4 | 44 | 1000 |

## Appendix B

## Enrolment Data

Enrolment Distribution (by age) for government schools 2022-23 - including Lighthouse School

| Age | Primary |  |  |  | Secondary |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Girls | Boys | Total | Girls | Boys | Total | Girls | Boys | Total |
| 3 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 years | 168 | 173 | 341 | 0 | 0 | 0 | 168 | 173 | 341 |
| 6 years | 121 | 110 | 231 | 0 | 0 | 0 | 121 | 110 | 231 |
| 7 years | 225 | 247 | 472 | 0 | 0 | 0 | 225 | 247 | 472 |
| 8 years | 193 | 179 | 372 | 0 | 0 | 0 | 193 | 179 | 372 |
| 9 years | 217 | 203 | 420 | 0 | 0 | 0 | 217 | 203 | 420 |
| 10 years | 220 | 220 | 440 | 0 | 1 | 1 | 220 | 221 | 441 |
| 11 years | 5 | 10 | 15 | 193 | 231 | 424 | 198 | 241 | 439 |
| 12 years | 0 | 0 | 0 | 232 | 230 | 462 | 232 | 230 | 462 |
| 13 years | 0 | 0 | 0 | 237 | 226 | 463 | 237 | 226 | 463 |
| 14 years | 0 | 0 | 0 | 221 | 242 | 463 | 221 | 242 | 463 |
| 15 years | 0 | 0 | 0 | 196 | 226 | 422 | 196 | 226 | 422 |
| 16 years | 0 | 0 | 0 | 186 | 143 | 329 | 186 | 143 | 329 |
| 17 years | 0 | 0 | 0 | 28 | 10 | 38 | 28 | 10 | 38 |
| 18 years | 0 | 0 | $\mathbf{0}$ | 0 | 1 | $\mathbf{1}$ | 0 | 1 | $\mathbf{1}$ |
| 19 years | 0 | 0 | $\mathbf{0}$ | 0 | 0 | $\mathbf{0}$ |  | 0 | $\mathbf{0}$ |
| Total | $\mathbf{1 1 4 9}$ | $\mathbf{1 1 4 2}$ | $\mathbf{2 2 9 1}$ | $\mathbf{1 2 9 3}$ | $\mathbf{1 3 1 0}$ | $\mathbf{2 6 0 3}$ | $\mathbf{2 4 4 2}$ | $\mathbf{2 4 5 2}$ | $\mathbf{4 8 9 4}$ |

Enrolment Data
Enrolment and staffing data by school type and district

|  | George Town | West Bay | Bodden Town | North Side | East End | Sister Islands | Totals | Percentage by category |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Schools | 15 | 3 | 2 | 2 | 1 | 4 | 27 |  |
| Total Enrolment |  |  |  |  |  |  |  |  |
| Enrolment by school | 6452 | 623 | 676 | 947 | 67 | 277 | 9042 | 100.0\% |
| Primary |  |  |  |  |  |  | 4515 | 49.9\% |
| Private schools | 2080 | 90 |  |  |  |  | 2170 | 48.1\% |
| Government schools | 946 | 431 | 645 | 79 | 66 | 124 | 2291 | 50.7\% |
| Home school | 25 | 15 | 10 | 4 |  |  | 54 | 1.2\% |
| Total (private and home school) | 2105 | 105 | 10 | 4 | 0 | 0 | 2224 | 49.3\% |
| Secondary |  |  |  |  |  |  | 4527 | 50.1\% |
| Private schools | 1785 | 75 |  |  |  |  | 1860 | 41.1\% |
| Government schools | 1593 |  |  | 858 | - | 152 | 2603 | 57.5\% |
| Home school | 24 | 11 | 21 | 6 | 1 | 1 | 64 | 1.4\% |
| Total (private and home school) | 1809 | 86 | 21 | 6 | 1 | 1 | 1924 | 42.5\% |
| Enrolment by gender |  |  |  |  |  |  |  |  |
| Girls | 3243 | 307 | 322 | 487 | 28 | 135 | 4522 | 50.0\% |
| Boys | 3209 | 316 | 354 | 460 | 39 | 142 | 4520 | 50.0\% |
| Total | 6452 | 623 | 676 | 947 | 67 | 277 | 9042 | 100.0\% |

Staffing and student teacher ratios by school type

|  | Private <br> Schools <br> (All Years) | Gov. <br> Schools <br> Primary | Gov. <br> Schools <br> Secondary | Home <br> school | Total <br> (Excluding <br> Special <br> Education) | Special <br> Education <br> (Lighthouse <br> School) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Students | 4030 | 2291 | 2603 | 118 | 9042 | $\mathbf{1 1 2}$ |
| Teachers | 426 | 203 | 244 | - | 838 | $\mathbf{1 9}$ |
| Student Teacher Ratio | 9 | 11 | 11 | - | 11 | $\mathbf{6}$ |

Enrolment Data
Enrolment Distribution by school type


Average Student Attendance for Primary and Secondary Schools



## Key Stage 2 SATs results by school

Percentage of students meeting the expected standard
Performance Indicators by School


End of Key Stage 2: Comparison of the Y6 performance metrics by school

KS2 Test: Comparison of CAT Predictors with Actual Attainment


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## Appendix H

Cayman Islands National Qualifications Framework (CINQF)

| 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 <br> - IB Diploma <br> - BTEC Level 3 (Nationals) <br> - Trinity Music Grade 8 | Associate Degree CAPE Advanced Placement | Key Stage 5 <br> Usually enables entry to the Bachelor's Degree (may also offer advanced standing) |
| Level 2 | - Cayman Islands Level 2 High Honours) <br> - CSEC (Grades I-III) <br> - GED <br> - IMI Level 2 <br> - ASDAN (CoPE) | School Diploma (Standard or <br> GCSE/IGCSE (Grades A*-C) <br> BTEC Level 2 (First diplomas) <br> - Trinity Music Grade 5 | Years 10/11/12 <br> (Key Stage 4 - Standard High School) <br> National Curriculum Level 7-8 |
| Level 1 | - Cayman Islands Level 1 High S <br> - CSEC (Grades IV-VI) <br> - CCSLC (Grades C \& M) <br> - IMI Level 1 | ool Diploma GCSE/IGCSE (Grades D-G) BTEC Level 1 (Introductory) | Years 7/8/9 <br> (Key Stage 3 - Middle School) <br> National Curriculum Level 5-6 |
| Entry Level | - Entry Level Certificates <br> - ASDAN Bronze Award | CoEA | Years 4/5/6 <br> (Key Stage 2 - Upper Primary) <br> National Curriculum Level 3-4 |
| Glossary of terms used in the CINQF |  |  |  |
| ALevel | Advanced level qualification. | These examinations typically allow for entrance into Bachelor level programmes |  |
| $\begin{aligned} & \hline \text { ASDA } \\ & \mathbf{N} \end{aligned}$ | Award Scheme Development and Accreditation Network | This organisation offers programmes and qualifications targeting skills for learning, employment and life. |  |
| BTEC | Business and Technology Educational Council | An examining body that validates and certifies vocational courses. |  |
| CAPE | Caribbean Advanced Proficiency Examination | This is an academic qualification awarded in a specified subject offered by the Caribbean Examinations Council; these examinations typically allow for entrance into Bachelor level programmes. |  |
| $\begin{aligned} & \hline \text { CCSL } \\ & \mathrm{C} \end{aligned}$ | Caribbean Certificate of Secondary Level Competence | This is an academic qualification awarded in a specified subject offered by the Caribbean Examinations Council; the certification is based on a core of knowledge skills, attitudes and values targeting school leavers. |  |
| CoEA | Certificate of Educational Achievement | An entry level certification usually assessed in the final three years of secondary schooling. |  |
| CSEC | Caribbean Secondary Education Certificate | This is an academic qualification awarded in a range of subjects offered by the Caribbean Examinations Council. This award usually leads to entrance to further programmes of advanced study. |  |
| CXC | Caribbean Examinations Council | A regional examining body that offers examinations at various levels. |  |
| GCSE | General Certificate of Secondary Education | This is an academic qualification awarded in a specified subject, generally taken in a number of subjects by students aged 14-16 in secondary education. |  |
| GED | General Educational Development | GED tests are a group of five subject tests which, when passed, certify that the taker has American or Canadian high school level academic skills. |  |
| IB | International Baccalaureate | The IB Diploma typically allows for entrance into Bachelor level programmes. |  |
| IGCSE | International General Certificate of Secondary Education | This is an academic qualification awarded in a specified subject, generally taken in a number of subjects by students aged 14-16 in secondary education. |  |
| IMI | Institute of the Motor Industry | The IMI offers certification in courses such as Vehicle Maintenance and Repair at various levels of competence. |  |

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## Appendix I

## Year 11 Key Performance Indicators Chart showing Trend Lines



## KS4 Performance Summary (Year 11)



## Appendix K

## KS4 Performance Summary (Year 11)

Comparison of results from 2019 with 2023 results


Year 12 Performance Summary by Gender


## Appendix M

## Percentage of students achieving at least one science subject



Percentage of students achieving at least one science subject: Comparison between performance in Year 11 and 12 for the same cohort


## Appendix N

Year 12 Performance Summary
Progress from Year 11 to 12 Percentage of students attaining the National Expected Standard


Year 12 Performance Summary
Progress from Year 11 to 12Percentage of students attaining the National Expected Standard


