



## **External Evaluation Report**

### **Cayman International School**

**November 2007**

**Lead Evaluator: Caroline Dawes**



**Education Standards and Assessment Unit**

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## Executive summary of the report

### Background

Cayman International is a private school for students aged between 2 and 18 years. It was established in 1994 as the Faulkner Academy and became Cayman International School in 2003. It now has a roll of 294 students, 177 in the elementary and secondary schools and 117 in the early years programme. A third of the students are Caymanian.

The school's mission is "to provide each student the opportunity to achieve her/his academic and personal best within a U.S./International educational environment that encourages leadership, character and community service, actively embraces cultural diversity, and acknowledges and accommodates the individual needs of students".

### How effective is the school overall?

Cayman International is a good school. Its strong focus on character education is reflected in all aspects of its work. The way the school helps students to become reflective, self-disciplined, empathetic young adults is excellent. The school is preparing students very well to become 'Educated Caymanians' as described in the National Consensus Document (2005).

There is a strong school culture and a clear vision for the school centred on character education. All teachers, including the high proportion who are new to the school this year, have a consistent approach to their interactions with students and have generally high expectations for their achievements. Parents are kept very well informed of what is going on in the school through regular email contact and the school's website.

Relationships between staff and students are excellent. They treat each other with a great deal of respect. Teachers are clearly very committed to the young people in the school. In turn, students behave very well. They care about and support each other, both in and out of lessons.

The quality of teaching is good. Students are helped to develop a wide range of effective study skills that support their learning in different

subject areas. They confidently use information and communication technology (ICT) for research and for presentation of their work. Their speaking and listening skills are excellent. Standards of students' work are generally higher than expected for their age and many make good progress from year to year.

Assessment procedures are adequate, but there is room for improvement. There are some good examples of assessment within the school. Many teachers regularly use rubrics and share these with students so they know what is required for a successful piece of work. However, the school is not currently monitoring students' progress systematically or analysing results in external standardised tests as rigorously as it could.

The current director, who has only been in post since September, has a clear vision of how the school should develop. However, the school lacks a strategic plan for its future growth. Currently, there are some shortcomings in management systems that contribute to inconsistencies, particularly within subject areas.

The evaluation team judged that the school has the capacity to respond to the findings of this evaluation and improve further.

## What the school does well

- There is a strong, positive school culture that fosters very caring, empathetic relationships between staff and students, characterised by mutual respect.
- Students' personal development is outstanding.
- Students' attitudes to learning are excellent and they achieve well.
- The school gives students the opportunity to develop a wide range of learning strategies that help them make good progress.
- Students have very good speaking and listening skills, and teachers provide many opportunities for these to be used and developed further.
- Teaching is good, particularly in the elementary and middle schools.
- The school provides a safe, secure and stimulating learning environment.
- The school communicates very well with parents.

## What needs to improve

- Management systems — to ensure the effective coordination, planning and support for teaching and the curriculum throughout the school
- Strategic planning — to ensure the future needs of the school are met
- The use of assessment data to monitor the progress and achievements of different groups of students.

*The school is expected to modify its existing improvement plan or to prepare a supplementary action plan to address the areas for improvement identified above. The amended plan or supplement should be sent to the Department of Education Services and Education Standards and Assessment Unit within 40 working days of receipt of the final report. The school is required to provide parents with an annual update on the progress that is being made in addressing the areas identified as needing to improve.*

## Introduction

The aim of the Cayman Islands' Education Standards and Assessment Unit (ESAU) is to contribute to the continuous improvement of education in the Cayman Islands, through rigorous independent external evaluations and by providing high quality policy advice and research.

Each school receives an external evaluation every four years. The evaluation identifies the school's strengths and the areas that need to be improved. In some cases, schools will be visited within four years in order to check on the progress that has been made in the areas identified as needing to improve. External evaluations are guided by the criteria in the *ESAU Handbook for the Evaluation of Schools*.

External evaluations provide schools, parents and the community, the Department of Education Services and the Ministry of Education, Training, Employment, Youth, Sports and Culture with an external and impartial evaluation of the quality of a school's work and its impact on students' learning and the standards they achieve. Through the publication of reports, external evaluations contribute to accountability, transparency and openness within the education system.

This was the first external evaluation for Cayman International School. It took place from **26<sup>th</sup> to 30<sup>th</sup> November 2007** and involved a team of seven evaluators. The Cayman Islands Early Childhood Services evaluated the early years programme at the same time. The following aspects of the school's work were looked at:

- Standards achieved and progress made by students in language arts, mathematics and science
- The effectiveness of teaching and how well students learn
- The quality of students' personal development
- The quality of the curriculum and how students are assessed
- How well the school is led and managed
- The quality of the support and guidance offered to students, the level of care for their welfare, and support for their attendance and punctuality
- The effectiveness of links with parents and the community
- How well the school is preparing students to become 'Educated Caymanians'
- How well teachers help students to learn and use their literacy, numeracy and information

technology skills across all of their school work.

The evaluation team gathered evidence in the following ways:

- Sixty lessons, or parts of lessons, were observed, mainly in language arts, mathematics and science, but including most subjects offered.
- School documents, including teachers' planning, curriculum statements and guidelines, were looked at and students' work was scrutinised.
- Evaluators observed assembly, morning homeroom, breaks and lunch times and after-school activities.
- Evaluators spoke with students and took their views from the questionnaires into account and heard students read.
- Discussions took place with teachers, other members of staff, parents and with the Vice-Chair of the Board of Directors.
- Comments from parents at the meeting before the evaluation and from the questionnaires were taken into account.

The evaluators used the following grading scale to describe aspects of the school's work:

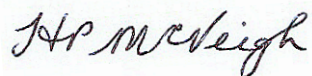
Grade		Description
1	<b>Very good</b>	Good in nearly all respects and exemplary in some significant areas
2	<b>Good</b>	Good in most respects. Weaknesses are minor and not in significant areas
3	<b>Adequate</b>	Satisfactory in most areas, no significant weaknesses, but no major strengths
4	<b>Unsatisfactory</b>	Some significant weaknesses (might be only one or two) that have negative impact on learning and standards

Evaluators also used the following criteria from the 'profile of the Educated Caymanian' to evaluate how effective the school is in helping students to develop these attributes:

The 'profile of the Educated Caymanian' states that an **Educated Caymanian** will:

- Be enthusiastic and motivated about learning, and will continue to extend his/her knowledge and skills after leaving school
- Be literate, numerate and adept at using information and communication technology
- Be a good communicator
- Be creative and appreciative of the arts
- Have a positive outlook and a high self-esteem
- Be well-rounded, good at finding solutions to problems, flexible and adaptable to changing circumstances and demands
- Have a strong work ethic and willingness to become an honest, reliable and responsible member of the work force
- Be respectful of God, him/herself, others, people from different backgrounds, the environment and property
- Be proud of and knowledgeable about the Caymanian culture, whilst respectful of other cultures and beliefs
- Be a good team player, civic-minded and willing to serve
- Have an awareness of global issues affecting aspects of life in the 21st century

The Education Standards and Assessment Unit hopes that this external evaluation will contribute in a positive way to helping Cayman International School become even more effective.



**Helena McVeigh**

Director

Education Standards and Assessment Unit

## Information about the school and the evaluation team

### School contact information

Type of school:	Private
Age range of students:	2 years - 18 years <sup>1</sup>
Gender of students:	Mixed
Number on roll:	294 (177 of school age)
School address:	Camana Bay PO Box 31364 Grand Cayman KY1-1206
Telephone number:	945 4664
Fax number:	945 4650
Email address:	jaskey_cis@iss.edu
Name of Director:	Jean Caskey
Name of Chair of the Board:	Dan Scinto

### Information about the school

Cayman International School is a private school for students aged between 2 and 18 years. It was established in 1994 as the Faulkner Academy, catering primarily for students who found success difficult in other schools. In 2002 the school was purchased by International Schools Services, a US-based company, and it opened as Cayman International in 2003.

The school is experiencing a period of rapid growth and has recently moved to brand new buildings, which were yet to be fully completed at the time of the evaluation. A high proportion of the students (41 per cent) are in the early years programme (Nursery through Pre-K 4), which was evaluated separately by the Cayman Islands Early Childhood Services. At the time of the evaluation, more than 40 per cent of the teachers, including the director, had joined the school this academic year.

The school has identified 11 students with special needs or who are learning English as their second language. These students are integrated into lessons and receive additional support from the 'optimal learning programme'.

The school follows a US-based curriculum and is accredited by the Middle States Association. The current Grade 12 will be the first graduating class for the school. The school draws on many of the principles of the International Baccalaureate programme, particularly its focus on character education. It is currently going through the authorisation process to offer the International Baccalaureate Diploma in Grades 11 and 12.

### The evaluation team

Lead:	Caroline Dawes	Education Standards and Assessment Unit
Team:	Helena McVeigh	Education Standards and Assessment Unit
	Pachent Smythe	Education Standards and Assessment Unit
	Edna Platts	Local Occasional Evaluator
	Kevin Roberts	Local Occasional Evaluator
	Garry Bignell	Overseas Evaluator
	Sandra Tweddell	Overseas Evaluator

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<sup>1</sup> This report considers provision for students of school age only, i.e. 5 to 18 years

## Commentary on evaluation findings

### How well do students achieve and make progress?

1. Overall, students' achievements are above the standards expected for their age. Students in the middle school do particularly well.
2. Children enter Kindergarten with higher than expected social skills and they are very good at speaking and listening. They build well on these firm foundations and make good progress from year to year.
3. Students in the elementary and middle schools have completed the annual Iowa Test of Basic Skills (ITBS) for the last three years. Cayman International School students perform well overall in these tests. The tests also show that most students make good gains in their learning as they move through the grades.
4. More detail on the standards of students' achievements in language arts, mathematics and science can be found in the subject sections of this report (pages 12 to 16).

### What is the quality of students' personal development?

5. Students' personal development is very good. Many teachers have skilfully created an excellent classroom ethos. They promote strong, positive relationships with and between students, and provide good opportunities for them to work collaboratively and productively. Teachers know students well and their lessons are characterised by mutual respect and a shared purpose of high achievement. The school provides many opportunities to foster students' spiritual, moral, social and cultural development. Teachers encourage and reinforce the development of good character and help to create independent, well-rounded, disciplined students.
6. Students' spiritual development is very good. They reflect on their learning and behaviour and ask a range of searching questions in class. Students develop knowledge and insight into their own values and beliefs as they share ideas about personal, local and global issues. Poetry lessons give students an opportunity to examine a range of human experiences, and help them to reflect on issues in their own lives. The school actively promotes an awareness and understanding of the feelings and views of others through the school-wide 'service learning' initiatives and regular support of different charities. One of their school projects involved raising funds, through the 'Water for Life' initiative, to dig a well in Africa. Another very good example is the annual 'Giving Tree' activity in which students and their parents donate gifts for needy children.
7. Students' moral development is very good. Teachers are very good role models within the school. They use praise effectively to encourage students to behave appropriately. The students respond positively and, throughout the school, they are thoughtful, polite and confident. They show respect for adults and each other and relationships are excellent.
8. Students work cooperatively in lessons. For example, in one Grade 6 drama lesson, students discussed their ideas maturely, and decided how they would choreograph their dance moves. They carried out different roles in their groups in a positive, confident way, and were very willing to help each other. One student remarked, "We compromise our ideas and work well together to make decisions about the dance".
9. Students' cultural development is good. They show understanding of their own culture and that of others through the many activities and projects they carry out in language arts, social studies, drama, music and art. These experiences enhance students' awareness and appreciation of the world in which they live. In art lessons, students develop an appreciation of different artists. For example in Grade 1, students learned about post-impressionism and discussed Vincent Van Gogh's 'Sunflowers'. They then produced their own paintings in the same style.
10. Caymanian culture is promoted well when, for example, students perform in the National Children's Festival of the Arts and take part in activities such as Batabano, Pirates'



week events, Commonwealth day and heritage celebrations.

11. Students' social development is very good. They have very positive relationships with each other and are always ready to help. For example, one student was upset in her lesson and a classmate asked permission from the

teacher to take her outside and comfort her. This kind of caring attitude is typical of many students.

12. Students develop leadership skills through the student leadership team, which is active in planning service learning projects and social activities such as the school dance.

### **How effective is the teaching and what impact does it have on students' learning?**

13. Overall, the quality of teaching is good. It was good or very good in 62 per cent of lessons seen during the evaluation, with 8 per cent unsatisfactory overall. It was better in the elementary and middle schools than in the high school. Very good teaching was seen in several subjects, including language arts, mathematics, science and global issues.

14. In the vast majority of lessons, students concentrate well and are fully engaged with learning. They are motivated by teachers, who generally have high expectations of their performance, and by activities that challenge them. Students' behaviour and attitudes are good and they clearly enjoy their learning. The ethos of the school promotes a very positive work ethic and results in students generally making good progress.

15. The best lessons in the school were well planned with clear outcomes, which were shared with the class. Teachers' approaches were based on a secure knowledge of their subject and they encouraged reflective, enquiry-based learning strategies. For example, in a very good middle school lesson on global issues, students were researching their chosen country's position on the Kyoto Agreement. They made good progress in their understanding of environmental issues

through effective use of search engines on the Internet, and by creating presentations on a particular country.

16. Teachers' good questioning ensures that students are clear about concepts and are guided towards solving problems without undue reliance on the teacher. For example, in a very good mathematics lesson in the elementary school, students were asked probing questions such as "How did you get your answer?" and "How do you know the total number of dots on the dominoes is 17?" to extend and consolidate their understanding of addition.

17. In some less successful lessons, teachers did not provide work that was suitable for the different abilities of the students. Their planning tended to lack rigour and learning objectives were unclear. In some cases, the teachers were not confident about the subject matter and relied too heavily on working methodically through a textbook.

18. Occasionally the pace of lessons was slow, particularly when they were more than an hour long. In these lessons, teachers did not always have high enough expectations of how much could be achieved. As a result, students did not make enough progress.

### **What is the quality of the curriculum?**

19. The school's curriculum is satisfactory, with some strengths. It provides breadth, balance and variety through a range of subjects taught in all grades and with the addition of electives in the middle and high schools. Together with opportunities offered beyond the school day, these constitute a rich and fulfilling learning programme. Character education and the development of the individual have a high priority. Teachers make good efforts to ensure links are made between subjects and to help students build on their prior learning.

20. The school curriculum is recorded electronically using a specialist software program which is readily accessible by all teachers. This is currently used to store schemes of work and lesson plans, but the full potential of this program is not yet being realised as a tool to identify gaps and possible overlap between subjects.

21. The school is going through the authorisation process to teach the International Baccalaureate Diploma programme in Grades 11 and 12. This programme has strong international credibility and sets high

standards, which should help to raise aspirations further.

22. The timetable is supplemented with a good range of extra-curricular activities. These enrich the curriculum and provide valuable opportunities for students to learn different skills such as cooking, dancing and sign language. Secondary school students have expressed a wish that there should be more choice available to them, as currently the activities are focused on the younger grades.

23. Although subject reviews take place on a regular cycle, there are no formal procedures for monitoring the curriculum and how it is being taught. The current arrangement of an eight day timetable throughout the school causes some confusion amongst staff and students, and with lessons lasting 85 minutes in the high school, teachers sometimes find it difficult to maintain a good pace of learning. Time at the beginning and end of the school day is also not always used effectively and productively.

### **How effective are the arrangements for assessing students' work and progress?**

24. Assessment procedures are adequate but there is room for improvement in this area.

25. The school has a useful electronic system for recording students' grades, which is used by all teachers. Every quarter, report cards are sent to parents with helpful information about students' achievements and effort using a simple grading system. Additionally, progress reports are issued by e-mail every two weeks. These arrangements are good. However, the extent to which students' progress is followed up by teachers is not consistent.

26. The results of school-based assessments are used to inform students' grades. Data from students' performance in standardised tests are given to teachers and are used to identify particular learning needs. However, students' results are not analysed in any depth to look for patterns or emerging trends, nor are they used consistently by all teachers as markers of progress towards a longer-term goal. When goals are set, they tend to be

expressed in general terms and are rarely specific to the subject or the individual student. Students tend to be unclear about what they need to do to improve.

27. The extent to which students are able to assess their own progress varies between subjects and teachers. Students' self-assessment happens regularly in subjects such as physical education, language arts and social studies. In some other subjects, it is limited to students marking their own work. In the best practice, teachers share and explain the rubrics for assessment with students so that they understand what is required of them and what is needed to improve their work. For example, in a very good middle school science lesson, the teacher shared the rubric for the students' presentations on a chosen planet. She then referred to this rubric frequently as she monitored and challenged the students while they were working on their projects.

### **How effective is the provision for students with special needs?**

28. Students with special needs are making satisfactory progress overall. They do particularly well in lessons where they are engaged in discussions, collaborate in groups, plan their work with others, share ideas, present their results and do practical activities. Those who have access to a teaching assistant often do well. The students make less progress when lessons are too directed by the teacher and when work is not targeted to their individual needs.

29. Most students with special needs are appropriately assessed and placed on the 'optimal learning programme' for support.

30. Students with special needs are generally well integrated into mainstream classes. The school's inclusive approach works well in giving students opportunities to work alongside their peers. Support is sometimes also effectively tailored to individuals' needs. For example, one student has been enabled to gain vocational skills through a regular work experience placement.

31. Students make satisfactory progress in the withdrawal sessions provided by the optimal learning coordinator. However, this support is not regular enough to help them to keep up with their classroom learning. On some occasions the students did not receive

the in-class support that was planned. During those times, students lost out on valuable learning time.

32. Some students have individual education plans (IEPs) which specify targets and strategies for improvement. Although teachers know the students well and are aware of their individual needs, they do not always use the information provided on IEPs well to plan lessons.

33. Regular 'student support team' meetings are an effective opportunity for teachers to raise concerns about students or to comment on the effectiveness of any intervention strategies. There is currently no formal system for tracking students and it is difficult for the school to know how much progress their targeted students are making.

## How well is the school led and managed?

34. Many aspects of whole-school leadership and management are good. The values and aims of the school are very coherent and shared by all members of the school community. The clear vision of the leadership team, with its strong focus on character education, drives all aspects of the work of the school. In a short period of time the new director has identified strengths within the school and areas that need to improve.

35. Performance management is well-established, and teachers have clear criteria on which to base their personal goals. Some teachers are observed teaching as part of their performance review, but this is not the case for all staff. Currently the director carries out all the performance reviews for teachers; this is untenable, particularly as the school grows.

36. There is a very collegiate approach to planning and development within the school, and teachers, parents and students are members of the strategic planning group. Many teachers are also involved in the cycle of curriculum reviews. This contributes to a common sense of purpose and enables the

full involvement of a wide range of stakeholders.

37. The current management structure consists of the director and the vice-principal. Although this may have been sufficient in a small school, as Cayman International has grown, this structure has become less effective. There is a lack of effective management systems in place to support the coordination of different subject areas. This leads to some inconsistencies, for example, in curriculum progression and continuity, and there is insufficient support and guidance for teachers about teaching different subjects. There are informal support structures, particularly in the elementary school, but teachers of higher grades sometimes feel isolated, especially if they are the sole subject teacher.

38. The school has a strategic plan and accompanying action plans, but these are in need of revision. Currently, these strategic plans do not effectively address the intended growth of the school and the targets are not challenging enough.

## How effective are other aspects of the school's work?

### The support and guidance offered to students and level of care for their welfare

39. Provision for the support, guidance and welfare of students is good.
40. The school maintains comprehensive personal and academic records for students, which are regularly updated. The records are stored centrally and are readily accessible to appropriate staff. Records include students' personal data and correspondence from parents as well as academic reports and test results, individual education plans, psychological assessments and work experience reports. The guidance counsellor also keeps confidential records.
41. Students are well cared for and feel very safe at school. The school has a comprehensive set of policies that cover all emergency situations and include a clear statement against bullying.
42. Students in all grades have effective guidance lessons led by the counsellor. These lessons provide students with good opportunities to explore a wide range of issues such as learning styles, the unique nature of individuals and applying for college. In a good Grade 11/12 guidance session, for example, students searched websites of colleges and universities and explored programme options and requirements. They discussed their choices with the teacher and had opportunity to receive further advice on an individual basis.
43. There is good guidance available for high school students about choosing electives that will lead to graduation. The school has also developed a useful handbook that provides students with help on applying to college.

### Attendance and punctuality

44. Attendance is good and students generally arrive at school on time.
45. Attendance and punctuality are regularly reported to parents through students' quarterly report cards. Teachers write constructive comments for students with poor attendance and punctuality, encouraging them to improve. There are also rewards for good attendance and punctuality, which are presented in secondary school assemblies.
46. The school analyses attendance data on an annual basis. This analysis is not always effective in identifying patterns or causes for concern. There are also currently shortcomings in the procedures for recording tardiness and students' lateness to lessons in the morning generally goes unchallenged by teachers.

### Links with parents and the community

47. The quality of information provided to parents is very good. Reports on students' progress are regular and substantial. Parents can access homework on the school's website and guidance is provided on how to support students with work at home. The weekly newsletter, 'CIS Hot Topics', contains much useful information for parents and the wider community. Parents generally feel well informed about what is going on at the school and applaud its 'family atmosphere'.
48. There is a very active parent teacher association that raises substantial funds for the school. Recent purchases include interactive whiteboards and electronic keyboards. Parents volunteer to assist at the school, for example, in the library, and serve on a variety of committees.
49. The school makes successful efforts to be involved with the local community through participation in a wide variety of events. For example, the school had a float in the Pirates' Week parade, participated in the Cay Kids triathlon and took part in a recent football match against local police. In addition, students' substantial service learning projects involve voluntary work and fund-raising for local charities. The school draws well upon

resources in the local community. There are field trips around the island and local guest speakers are invited to the school. For example, a visiting author, organised by the

local bookshop, read stories to elementary school students, who all listened intently and were keen to ask questions.

# What is the quality of teaching and learning in subjects?

## Language Arts

50. The provision for language arts is good. Teachers are committed to the values of the school and work hard to ensure that their students achieve well. Standards of achievement are generally above what is expected and a significant number achieve very well. Students' speaking and listening skills are very good. From Kindergarten, students are expected to express themselves carefully and by the end of Grade 12, most are articulate, fluent speakers who capably sustain a point of view.
51. Students learn to enjoy books from an early age and many use an appropriate range of reading strategies to understand what they are reading. In a few younger classes, teachers over-emphasise the teaching of phonics and sight vocabulary, at the expense of understanding the meaning of the text. However, by the end of Grade 12, most students are confident readers, able to tackle the reading necessary for life-skills or for further study. Teachers present books enthusiastically, which helps promote students' enjoyment and enthusiasm for reading. One teacher uses a very effective approach of allowing students to spread themselves around the room, cosily tucked up with blankets and cushions whilst reading quietly; a child even brought in her soft toy to share her enjoyment. This is excellent practice and is one example of how a few teachers keep up-to-date with research to keep their teaching sharp. Authors are invited into school and enthral students with their reading. Students learn to appreciate the literature from a wide range of cultures, including Caymanian.
52. Students write competently for a range of purposes, such as descriptive writing, stories and arguing a point of view. In Kindergarten, students take it in turns to look after Franklin Turtle and take photographs and write about his adventures with them. This is presented as a most attractive book that children love to share. All students in Grades 9 to 12 wrote high quality, often moving, poems on the themes of the human condition and global issues. All confidently read their poems to their classes and a small number read to the school in the secondary school assembly. A number of students, more often boys, do not take care with the presentation of their work.
53. Most students make good progress. However, in the elementary school, some of the most and least able do not make enough progress, as work is not always matched to their needs. In the secondary school, the most able make good progress as expectations of what they can achieve are very high. The expectations are not always realistic for the least able students, who sometimes struggle to keep up.
54. The school does not analyse results to see how well different groups of students perform. The evaluation found that boys' work was sometimes of a lower quality than girls'; they become bored more easily when they were not motivated by the lesson.
55. The quality of teaching is good overall and students' learning is supported by their excellent personal development and relationships. Students are very respectful, listen carefully to each other and work very well in groups. They develop good skills in evaluating their own work, as this is expected from an early age when they select pieces for their portfolios. In older classes, students also evaluate their own work and that of others.
56. There are some areas for improvement in the quality of teaching and learning. A few teachers rely too heavily on the textbook rather than interpreting it in the light of their students' needs. Sometimes, teachers do not give students enough opportunities to participate or engage in discussion. Teachers do not always present learning objectives as clear statements of what students are expected to know, understand or do.
57. Teachers' subject knowledge is supported very well by professional development. Their subject knowledge in the upper part of the school is excellent and expectations of students' work are generally high because of this.
58. Technology is used well by students to present the final draft of writing and in the secondary school for the first to the final drafts. This practice is inconsistent in



the elementary school. The school has established a good link with a linguist in France who has developed an approach to teaching spelling. Students in Grade 4 were excited to see and speak to this person through a video link and a few of them began to show an interest in linguistics as a result.

59. All teachers assess work regularly and rubrics are helpfully shared with students so they know what is expected of them. Information from assessment is not used well enough, though, to shape teaching to the needs of individual students. There is little diagnostic assessment to pick up on areas of strength and weaknesses in learning. Teachers'

marking of work rarely suggests how it can be improved.

60. There is currently no coordinator for language arts across the school, but the subject is sustained by professional development provided by a key teacher in the elementary school and by the willingness of teachers to do the best for their students. There is little monitoring of the subject, so inconsistencies in the quality of teaching have not been picked up. There are few support mechanisms for new teachers apart from informal help from colleagues and curriculum continuity relies on the goodwill of teachers rather than formal management systems.

### Literacy across the curriculum

61. Students have well-developed literacy skills and they use these effectively to support their learning. Skills of speaking and listening are promoted very well by all subject teachers across the school. Most teachers encourage students to answer precisely using the technical language of the subject. Teachers also provide good opportunities for students to

develop the reading and writing skills needed for different subjects. Students present information in a variety of ways, for example, in social studies, evaluating why they selected objects for a time capsule. Students made good use of their story telling skills in a guidance lesson to promote the idea that all people are unique.

### Mathematics

62. Overall, the provision for mathematics in the school is good because of the effective teaching that most students receive. Students have a strong foundation when they enter the school and they continue to make good progress.

asking open-ended questions, teachers help students think ideas through. This interchange of ideas allows students to evaluate and clarify mathematical concepts.

63. Students throughout the school have positive attitudes to learning. When they enter class they settle quickly, have their equipment ready, and are all set to learn. This allows them to begin activities without delay and make excellent use of class time. Many students enjoy mathematics and confidently ask questions and participate orally because of the good classroom culture. They express their ideas clearly and use correct vocabulary when doing so. Students work well together and enjoy sharing ideas. They also work well independently, which gives them a chance to reflect on their understanding and see if they have mastered the concepts. Students have a good selection of readily available resources that they use appropriately to further their learning.

65. Teachers help students develop a wide range of problem solving strategies. For example, in one middle school lesson, a number of students expressed great pleasure at the challenge and excitedly tackled the problems, talking out theories as they were working. Comments such as, "let's test your theory" and "O.K, here are my strategies" indicated that students were progressing well and thinking mathematically.

64. Teachers promote good social interactions and all students' contributions are valued. By

66. Students use a variety of calculation strategies. For example, in a Grade 2 class students were mentally adding two digit numbers that ended in five or zero. They were asked how they got the answer 70 when adding 45 and 25. One student described her method, which involved mental addition. Another used 'jumps' on the number chart on her desk. All were engaged in the activity and enjoyed sharing their knowledge. Teachers in the elementary school, in particular, provide a variety of interesting games and

activities. Students find these exciting and this adds to their joy of learning.

67. During some lessons, assessment is carried out in a number of interesting and effective ways. In some classes students wrote answers on individual whiteboards and showed the answer to the teacher. In others, a 'thumbs up' indicated agreement. Some students checked answers with a partner or within a group, which gave them the opportunity to clear up any misunderstandings and move on in their learning. Assessment of progress over time is less well developed and students generally do not measure themselves against longer term goals.

68. Standards achieved by students in mathematics are generally higher than expected. However, sometimes the more able students are not catered for effectively. The school has moved some able students up

a grade, but this has not always been effective. Students with special needs receive support from teachers and classmates, but it is not planned for systematically.

69. Learning objectives are currently not stated clearly for all lessons. Teachers tend to use the ones suggested in their textbook, which are generally too vague and difficult to measure students' progress against. Sometimes teachers rely too much on the textbook and they do not adapt the materials to suit the needs of the class.

70. Although provision is good, the lack of coordination is having an impact, particularly in the middle and high school. Teachers who lack subject knowledge or experience are in need of more support and guidance. There is not enough monitoring of the subject to ensure that the quality of mathematics teaching is consistently high.

### **Numeracy across the curriculum**

71. Students are given good opportunities to develop their numeracy skills through subjects other than mathematics. Kindergarten classrooms, in particular, have numeracy-rich environments. Some good examples in other elementary classes include the use of clocks on timetables as well as written time. In a Grade 1 class, children counted friends in a lively activity. In elementary science lessons,

students used Venn diagrams to present information on butterflies. In their social studies lessons, Grade 5 students interpreted line graphs and pie charts showing information about China's ships during the Age of Exploration. In middle school science, students use scientific notation, measurement and scale drawing.



## Science (secondary school)

72. The provision for science in the secondary school is adequate overall. It is good in the middle school, where students generally make good progress and achieve standards that are above expectations. In the high school, students' achievements are in line with expected standards in Grades 9 and 10, but are below in Grades 11 and 12.
73. Students are given a good start in the elementary school. The teaching here is good and children are developing basic concepts and skills well; for example, Kindergarten students are measuring and recording temperature as part of their weather record. Grade 4 students are learning about scientific processes and show a good understanding of terms such as 'inference' and 'prediction'. In a very good Grade 5 lesson, the students were motivated by the use of arm actions to help them remember factors involved in photosynthesis.
74. Students' knowledge of science is often very good, particularly in the middle school. Many have an excellent recall of what they have been learning. They remember facts and figures well and can give accurate definitions and explanations. For example, Grade 6 students could state the mass, size and other characteristics of planets they were studying. They knew about solar and lunar eclipses and some could confidently explain advanced ideas such as 'escape velocity' and 'astronomical unit'. Students in Grades 9 and 10 were studying ecosystems and most knew what photosynthesis is and the difference between consumers and producers.
75. The quality of teaching is good in the middle school and adequate overall in the high school. Teachers have very good relationships with their students and there is a strong sense of respect on both sides. Teachers use a range of activities, with a good focus, particularly in the middle school, on encouraging students to find things out for themselves and to undertake research.
76. Students have a very positive attitude to science. They are motivated and enthusiastic. They respond very well to the opportunities to carry out individual or group research, as seen in Grades 6, 7 and 8. Grade 8 students also enjoyed and learned a great deal from making three-dimensional models of plant and animal cells.
77. Students make very good use of information and communication technology for research and presentation purposes; for example, projects on planets in Grade 6 and on extreme weather in Grade 7. They cooperate very effectively and support each other when working in pairs or small groups. They appreciate being given a choice in how to present their findings; for example, in Grade 8, some students chose to illustrate the water cycle through drama, whilst others prepared a brochure or PowerPoint presentation.
78. A few lessons were less effective because there was an over-reliance on working through the textbook and reading it as a whole class. This slowed the pace and did not involve or motivate all students.
79. Students are provided with a reasonable number of practical activities, but not enough investigations that they can plan and undertake themselves. There was, though, a good example of this in Grade 7, where students had compared the effects of heating soil and water – they predicted, planned, carried out the investigation, tabulated results, drew a graph and came to a conclusion.
80. The science curriculum is not well planned or coordinated across the school. Although teachers are generally offering students a good range of experiences, there is an over-reliance on following the textbook, which often goes into unnecessary detail for the younger grades. There is also repetition of some aspects, particularly in biological areas. Currently, students are not progressing as well as they could in science because of the lack of overall coordination and because there is no one with experience of teaching to high school level.

## Information and communication technology (ICT) across the curriculum

81. The use of ICT across the curriculum is good and students are very confident and competent in using a range of ICT tools.
82. Students learn and apply a wide range of ICT skills across most subject areas. For example, middle school students used the Internet for research on the Kyoto agreement in their global issues lesson and used presentation software to display their findings. In Grade 8 science, students effectively used a variety of tools to research and present information on planets - some students designed presentations while others made movies or chose graphic software to present their findings. Students collaborated with each other well in designing and refining their work. In mathematics, some students have the opportunity to practise their numeracy skills using web-based games. In language arts, students use word processing to help them with their writing. In one language arts lesson, there was very good use of video-conferencing to link students with a linguistics specialist in France.
83. ICT is taught as a subject to all students up to Grade 5, after which it becomes an elective. This means that not all students continue to learn new ICT skills. Although students and teachers use ICT well across the curriculum, there are some areas of modelling, design and control that are not taught.