ISA
International Schools' Assessment

2019–2020 **Information Pack**

$\{\sqrt{x}\}^2$ *Mathematical Literacy*

Reading

Writing

Scientific Literacy

ACER

What is the ISA?

The ISA is a set of tests used by international schools and schools with an international focus to monitor student performance over time and confirm that their internal assessments are aligned with international expectations of performance. The ISA assesses students in Mathematical Literacy, Reading, Narrative Writing, Expository Writing and Scientific Literacy.

Designed and developed by the Australian Council for Educational Research (ACER), the ISA Reading, Mathematical Literacy and Scientific Literacy assessments are based on the Programme for International Student Assessment (PISA). PISA is developed under the auspices of the Organisation for Economic Cooperation and Development (OECD). Please note that the ISA is not part of PISA and is not endorsed by the OECD.

Over 90 000 students from more than 400 schools participated in the ISA in 2018-19

What is ACER?

ACER is one of the world's leading educational research centres, committed to creating and promoting research-based knowledge, products and services that can be used to improve learning across the life span. ACER has built a strong reputation as a reliable provider of support and expertise to education policy makers and professional practitioners since it was established in 1930.

What is PISA?

PISA is a triennial international survey which aims to evaluate education systems worldwide by testing the skills and knowledge of nationally representative samples of 15-year-old students in key subjects - reading literacy, mathematical literacy and scientific literacy - in order to inform national stakeholders about how well their education systems are preparing young people for life after compulsory education. To date, nearly 2 million students representing more than 70 economies have participated in the assessment. In 2015, over 500 000 students in 72 countries and economies participated in the PISA data collection.

Why was the ISA developed?

The idea for the program evolved from two sources: discussions with the international school population, and our role in PISA.

Through consultation with international schools in the East Asian region, ACER learned about the need for an assessment that would provide them with quantitative and qualitative feedback which could be used for improving learning, as well as for making comparisons with relevant populations. Although many schools were using existing external assessment for monitoring and self-evaluation, there was a general sense that, because these were primarily designed for national use, they did not cater for students from diverse linguistic and cultural backgrounds.

ACER led a consortium of research and educational institutions as the major contractor to deliver the PISA project on behalf of the OECD from 2000 to 2012. Through managing PISA, ACER gained invaluable experience in developing assessments that are culturally and educationally appropriate for students from many language and educational backgrounds. These two elements gave ACER confidence that a program like the ISA was needed, and that we were in an ideal position to provide it. The ISA subsequently launched in 2002.
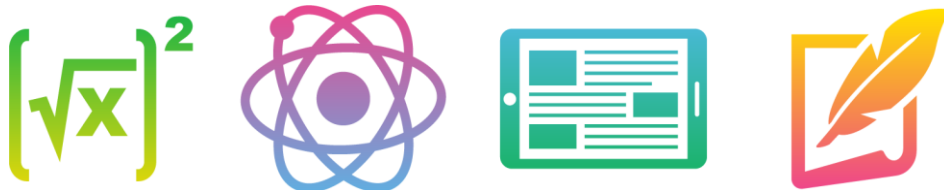
Why do schools use the ISA?

Schools use the ISA because:

- It is not specific to a single curriculum

- It tests core skills in mathematical literacy, reading, writing and scientific literacy

- The test material is eclectic, drawing on many cultural and national sources

- The assessments are designed with the knowledge that more than half of participants have first languages other than English

- It includes writing tasks and open-ended questions to better illuminate students' thinking processes (like PISA, the ISA is not just a multiple-choice test; half the questions in the tests are open questions that require students to construct a response, for example, to explain their reasoning, to find evidence or to justify their opinion)

- It provides diagnostic information that can be used at the school, class, or individual level

- It enables performance to be related to international benchmarks

- It allows schools to evaluate the reliability of their internal assessments and confirm that they are aligned with international expectations of performance

- It uses scaled scores that enable monitoring of student performance over time

- It enables comparison of the results of their Grade 8, 9 and 10 students with the latest PISA country results.

How and when is the ISA delivered?

Mathematical Literacy, Reading and Writing are delivered in paper or online format for students in Grades 3 to 10. Scientific Literacy is delivered online for students in Grades 3 to 10. Schools can administer the tests in either September or February.

The ISA is administered by classroom teachers equipped with detailed test administration manuals. The test material is secure; administrators sign a confidentiality agreement, and must return all student booklets (for paper ISA), used or unused, to ACER. Each assessment session takes approximately 45 minutes to one hour.

For the paper-based ISA, students enter their responses in a single booklet that contains the stimulus and the tasks. The online-based ISA is delivered via a fully web-based service and works on many platforms (Macs, PCs and iPads/tablets). Each school is provided with a unique testing URL through which each student logs on using an individual username and password.

How is the ISA marked?

Marking is conducted by our highly-trained ISA marking staff. All markers are required to have a background in the relevant domain: for example, Grade 10 Mathematical Literacy markers must be secondary school mathematics teachers or equivalent.

A marking guide is prepared for each Mathematical Literacy, Reading and Scientific Literacy constructed-response item and for the two Writing tasks. The marking guides describe the criteria needed to gain a given score, and provide examples of student responses typical of each score.

Markers receive initial training in the use of the ISA marking guides and follow-up training if necessary throughout the marking operation. The accuracy of the marker is checked against control scripts and team leaders monitor their markers to ensure any issues in the application of the marking guide are discovered and addressed promptly.

Who is consulted for feedback?

ACER has had ongoing consultations with faculty of many international schools and others involved in international education, through attendance at the Educational Collaborative for International Schools (ECIS) leadership conferences, the East Asia Regional Council of Schools (EARCOS) leadership conferences, the Association of International Schools in Africa (AISA) educators' conferences and the Near East South Asia (NESA) Council of Overseas Schools leadership conferences.

ISA project team members take the opportunity wherever possible to make site visits to participating schools, and have been engaged as consultants for extended work in developing and evaluating curriculum and assessment with individual schools.

Specific feedback and consultation on the development of the ISA instruments is conducted via formal trial testing and questionnaires to teachers and administrators during both trial and main administrations.

ISA Reporting

The ISA provides a number of customised reports for each participating school. The below table summarises the content, purpose and intended audience of each report.

Report	Broad description	Purpose	Intended audience
Individual	Provided for each individual - displays student's overall performance in each test in relation to described levels of proficiency.	To show the student's **current level of proficiency** and help parents to identify the skills their child has mastered and the skills they still they need to develop. Parents can track their child's progress over time because the ISA scores can be compared from year to year.	Class teachers, individual students and their parents
Class	Provided for each class - displays item-by-item and aggregated record of individual students' results.	To provide **diagnostic information** about class, sub- group and individual performance on significant clusters of items. Gives teachers detailed information about the kinds of skills their students have mastered and those they still need to learn. Displays how students performed in each question on the test compared to other international schools. Scale scores allow teachers to directly compare students' results at different grade levels and to track performance of students over time.	Class teachers, subject and grade-level coordinators
School	Provided for each school - displays aggregated school data on performance by grade level and subgroup, including comparisons with ISA schools and 'like' schools (those with a similar percentage of students from English speaking backgrounds).	Allows schools to **benchmark** themselves against other schools internationally. Provides summary statistics that allow schools to monitor their performance over time and to compare their performance at each grade level with other schools that participated in the ISA. Provides the basis for trend analysis and school-level target setting.	Heads of school, curriculum coordinators, school boards
National Comparisons	For Grades 8, 9 & 10, comparison of the school's performance against PISA country data.	Provides a broad picture of school **performance** in mathematical literacy, reading and scientific literacy in **relation to relevant national groups**.	Heads of school, curriculum coordinators, school boards
Interactive Diagnostic	Provided for each school - an interactive spreadsheet that shows results in a range of graphic displays, making it easier to identify trends and patterns and to gather diagnostic information.	Provides instant customisation of reports in graphic formats so schools can **interpret and use the ISA data to inform improvements in teaching and learning.**	Class teachers, subject and grade level coordinators, heads of school, curriculum coordinators
Interactive Tracking	Provided for each school on request - an interactive spreadsheet that shows performance against ISA benchmarks and tracks performance of individual students and cohorts over time.	Allows schools to **monitor the performance over time** of individual students and of different groups of students within a school. Data from all schools participating in the ISA program have been used to establish reliable benchmarks. Schools can monitor, over a number of calendar years, whether student performance has changed in relation these benchmarks.	Class teachers, subject and grade level coordinators, heads, curriculum coordinators

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How can schools use the ISA data?

Extensive support material is available to help schools to use their ISA data to inform and improve their teaching programs. These include a number of guides and videos, for example:

- the *Guide to Reports*;

- *How to use the ISA for Benchmarking and Diagnostic Information*;

- *A Guide to Interpreting the ISA Data for School Leaders and Administrators*;

- *Using ISA to improve learning;*

- *Overview of ISA reports.*

Annotated writing samples are also available to help teachers to understand what is expected at each of the levels and can be used by teachers to moderate their own scoring of writing.

If schools require more information or assistance with ISA reports and data, they should contact the ISA Team directly at isa@acer.org

What are scale scores?

The "ISA scale score" is different to the "raw score" results that you would get by adding up the number of score points for correct answers on each part of the assessment. Each learning area or domain (for example, Reading) has a scale, and the raw scores calibrated onto that scale are then converted to scale scores.

The ISA scales for Mathematical Literacy, Reading and Scientific Literacy are based on those developed for the OECD's PISA. However, it is not correct to describe ISA results as 'PISA scores'. The average proficiency of 15-year-old students in OECD countries in Mathematical Literacy, Reading and Scientific Literacy was set at 500, with a standard deviation of 100, for the year 2000. In the 2015 PISA administration the mean performance in Mathematical Literacy was 490, in Reading it was 493 and in Scientific Literacy it was 493.

The advantage of using scale scores rather than raw scores or percentage reporting is that the scale makes it possible to compare the results of all students within the same domain. For example, using scale scores in Reading, we can directly compare the performance of students from Grade 3 to Grade 10 for any year. It does not matter which Reading test students completed; their scale scores can be compared with the scale scores of any other students who have completed an ISA Reading test in any year.

Tracking the ISA scale scores over time can provide quantitative evidence of variations in the abilities of cohorts of students and individuals from one year to the next, as well as evidence of the impact of changes in curriculum or pedagogy on student performance.

What are proficiency levels?

The ISA has also developed described proficiency scales based on PISA reporting.

- ISA Reading is reported in terms of ten described levels of achievement across three aspects; ISA Levels 3 to 9 are virtually identical with PISA Reading Literacy Levels 1b to 6.

- ISA Mathematical Literacy has four described content-based scales, with ten levels in each scale. Levels 4 to 9 are very slightly modified versions of PISA Mathematical Literacy Levels 1 to 6.

- ISA Scientific Literacy has seven described proficiency levels (Level 0 to Level 6) organised into three areas of competency. These are generic descriptions of the development of proficiencies based on the results of the test and are closely related to those developed for PISA.

- ISA Writing has ten described levels of achievement for narrative/reflective writing, and nine described levels for exposition/argument writing.

How valid are the comparisons?

The ISA paper and online Series Q tests of Mathematical Literacy, Reading, Writing and Scientific Literacy were administered to over 90 000 students in more than 400 international schools across the 2018–19 cycle.

In the Mathematical Literacy, Reading and Writing assessments, ISA schools are also divided into four "like school" groups on the basis of proportion of students with an English speaking background. We provide comparative data for "like schools", but are careful to do so only when the numbers of students are large enough to yield meaningful comparison. The ISA reports also include a t-test calculation of the significance of the comparisons.

The validity of the ISA results relies on the co-operation of the schools to administer the ISA in accordance with the provided instructions, to ensure all students complete the test under the same conditions. We rely on schools to keep the ISA content secure by ensuring that test material is not copied and that all test materials are returned to ACER. This allows us to provide scaled scores that link the tests over time. We also rely on schools to only exclude students from their aggregate scores when they are genuinely unable to attempt the test, so that data accurately reflects student achievement in the school. It is up to the community of international schools to collectively support the rules and ensure they are followed so the ISA comparative data is of maximum use to everyone.

How valid and reliable are the tests?

The ISA tests have a high level of validity and reliability.

A valid test gives an accurate measurement of the ability of all the test takers, from the least able to the most able. ISA employs an experienced team of test developers, almost all of whom are former teachers. Appropriate content (and language) for each grade level is judged based on the collective experience of the test development team and after consulting a diverse range of grade level curricula from across the world. This is then confirmed empirically during trial testing, when the actual difficulty of the tasks for the target group is observed through data collection and analysis of student responses. Item Response Theory (IRT), the method of statistical analysis used by ACER, allows the proficiency of the students and the difficulty of the tasks to be calibrated on the same scale. This technique enables us to select tests that match the range of proficiency levels of the target group.

A reliable test ensures that the variable of interest (i.e. Mathematical Literacy, Reading, Scientific Literacy or Writing) is tested in a consistent way, such that one can generalise about the result. A simple summary of this kind of reliability is provided by the internal consistency statistic. A figure of 0.8 is considered a very good statistic for internal consistency. Overall, the ISA test reliabilities have means in the range of 0.80 to 0.88 from Grade 3 to Grade 10, which indicates that ISA tests have very good reliability for Mathematical Literacy and Reading from 2002 to 2018, and for ISA Scientific Literacy from 2013 to 2018. (Since the two kinds of writing are each assessed by only one task, internal consistency statistics cannot be calculated for this domain). The standard deviations are in the range of 0.01 to 0.04, which means that the reliability values are consistently good.

If you would like more detailed information on the construct and validity of the assessment, or to view tables showing the internal consistency figures for Mathematical Literacy, Reading and Scientific Literacy from 2002 to 2018, please contact us at isa@acer.org

ISA
International Schools' Assessment

2018-19 Participating Schools

Over 90 000 students from more than 400 schools participated in the 2018-19 ISA administration. The following 345 schools have given their permission for their name to be published by ACER on this list.

ASIA

CAMBODIA	Australian International School Phnom Penh
	East-West International School
	Hope International School
	International School of Phnom Penh
	Northbridge International School Cambodia
	Peppercorns Home School
CHINA	BASIS International School Guangzhou
	BASIS International School Hangzhou
	BASIS International School Park Lane Harbour
	BASIS International School Shenzhen
	Beijing City International School
	BIBS (Beanstalk International Bilingual School) - Shunyi Campus
	BIBS (Beanstalk International Bilingual School) - UES Campus
	Chengdu International School
	Chengdu ISC International School (Zhonghai)
	Guangzhou Grace Academy
	International School of Beijing
	Jurong Country Garden School
	Nanjing International School
	Qingdao Amerasia International School
	Shanghai Rainbow Bridge International School
	Shanghai Shangde Experimental School
	Shanghai Singapore International School
	Shanghai United International School - Hongqiao Campus
	Shanghai United International School - Pudong Campus
	Shanghai United International School - WanYuan Campus
	Shanghai United International School - Wuxi Campus
	Shanghai World Foreign Language Primary School
	Shen Wai International School
	Snow Mountain Academy for Language and Culture
	Suzhou Singapore International School
	The Garden International School
	The International Montessori School - Beijing
	Tsinghua International School
	Utahloy International School - Guangzhou
	Utahloy International School - Zengcheng
	Xi'an Liangjiantan International School
	Yew Chung International School - Beijing
	Yew Chung International School - Shanghai Gubei
	Yew Chung International School - Shanghai Hongqiao
HONG KONG	Bradbury School
	Chinese International School
	Clearwater Bay School
	Discovery College
	Glenealy School
	HKCA Po Leung Kuk School
	Hong Kong Academy
	Kennedy School
	Kingston International School
	Kowloon Junior School
	Norwegian International School
	Peak School
	Quarry Bay School
	Renaissance College Hong Kong
	Sha Tin Junior School
	Singapore International School (Hong Kong)
	The Independent Schools Foundation Academy (ISF Academy)
INDIA	Ascend International School
	Fountainhead School
	Good Shepherd International School
	International School of Hyderabad
	Lancers International School
	Neev Academy
	Oberoi International School - JVLR Campus
	Oberoi International School - OGC Campus
	Pathways School, Noida
	RBK International Academy
	Victorious Kidss Educares
INDONESIA	ACG School Jakarta
	Bali Island School
	BINUS School Simprug
	Canggu Community School
	Intercultural School of Bogor
	Jakarta Intercultural School
	Mt. Zaagkam School
	Sanur Independent School
	Semarang Multinational School
JAPAN	Aichi International School
	Aoba-Japan International School
	Hiroshima International School
	International School of the Sacred Heart
	K. International School Tokyo
	KAIS Elementary & Middle School
	Kyoto International School
	Makuhari International School
	Nagoya International School
	New International School of Japan
	Nishimachi International School
	St. Michael's International School
	Tamagawa Academy IB Programmes
	The Montessori School of Tokyo
	Tohoku International School
	Tokyo West International School
	Tsukuba International School
	Yokohama International School
KYRGYZSTAN	ESCA - Bishkek International School
MALAYSIA	Australian International School Malaysia
	IGB International School
	International School of Kuala Lumpur
	Tenby International School Setia EcoHill
	Tenby International School Tropicana Aman
	Tenby Schools Penang
	Tenby Schools Ipoh
	Tenby Schools Miri
	Tenby Schools Setia Eco Gardens
	Tenby Schools Setia Eco Park
MYANMAR	Ayeyarwaddy International School
PHILIPPINES	Cebu International School
	Domuschola International School
	Noblesse International School
	The Beacon Academy
SINGAPORE	EtonHouse International School Thomson
	GEMS World Academy (Singapore)
	German European School Singapore
	Invictus International School
	ISS International School Singapore
	Middleton International School
	NPS International School
	United World College of South East Asia - Dover
	United World College of South East Asia - East
SOUTH KOREA	Dwight School Seoul
	International School of Koje
	Seoul International School
	Taejon Christian International School
SRI LANKA	Overseas School of Colombo
TAIWAN	Taipei Kuei Shan School

THAILAND	Bangkok Patana School
	Concordian International School
	International School Bangkok
	Kajonkietsuksa School
	Norwich International School
	Prem Tinsulanonda International School
	RC International School
	St. Mark's International School
	The Australian International School of Bangkok
VIETNAM	European International School HCMC
	Hanoi International School
	Singapore International School @ Ciputra
	Singapore International School @ Da Nang
	Singapore International School @ Gamuda Gardens
	Singapore International School @ Van Phuc
	Singapore International School @ Vung Tau
	Singapore International School @ BDNC
	Singapore International School @ Saigon South HCMC
	United Nations International School of Hanoi

EUROPE

AUSTRIA	Amadeus International School Vienna
	Anton Bruckner International School
	Danube International School Vienna
AZERBAIJAN	Baku-Oxford School
BELGIUM	Antwerp International School
	British School of Brussels
	St. Johns International School
CZECH REPUBLIC	International School of Prague s.r.o.
FRANCE	American School of Grenoble
	International School of Nice
	International School Paris
GERMANY	Berlin Brandenburg International School
	Bonn International School
	Heidelberg International School
	International Bilingual School Munich
	International School Hannover Region
	International School of Bremen
	International School of Ulm/Neu-Ulm
	Metropolitan School Frankfurt gGmbH
	Munich International School
	SIS Swiss International School - Friedrichshafen
	SIS Swiss International School - Ingolstadt
	SIS Swiss International School - Regensburg
	Strothoff International School
	Thuringia International School
ITALY	International School of Bergamo
	International School of Bologna
	International School of Como
	International School of Milan
	International School of Trieste
	International School of Turin
	The International School of Naples
NETHERLANDS	American School of the Hague
	RA International School
NORWAY	Arendal International School
	International School of Bergen
	Manglerud Skole
	Sandnes International School
	Skagerak International School
POLAND	BISC Wroclaw
	Embassy International School
	International American School of Warsaw
	International Trilingual School of Warsaw
	Wroclaw International School
	British International School of Cracow
PORTUGAL	Saint Dominic's International School
ROMANIA	Verita International School
RUSSIA	Moscow Economic School
	Sakhalin International School
SPAIN	Arenas Bilingual Schools
	British School of Vila-Real
	El Altillo School
	Fontenebro School
	Lady Elizabeth School
	Newton College

	Palacio de Granda School
	San Pedro International College
	St George Almería
	St George Malaga
	St George Sevilla
	The American School of Barcelona
SWEDEN	Futuraskolan International School of Stockholm
	International School of Helsingborg
	International School of Lund - Katedralskolan
	International School of the Gothenburg Region
	International School of the Stockholm Region
	Malmö International School
	The International School of Almhult
SWITZERLAND	Inter-Community School, Zurich
	International School Berne
	International School of Lausanne
	International School of Zug and Luzern
	John F. Kennedy International School
	La Cote International School
	Obersee Bilingual School
	SIS Swiss International School - Basel
	SIS Swiss International School - Männedorf-Zürich
	SIS Swiss International School - Rotkreuz-Zug
	SIS Swiss International School - Zürich
	SIS Swiss International School - Zürich Wollishofen
	SIS Swiss International School - Pfäffikon
	Zurich International School
TURKEY	Hisar School
UNITED KINGDOM	Claremont School
	International Community School
	International School of Aberdeen
	Oaks International School
	Southbank International School - Hampstead
	The American School in London

AFRICA

ANGOLA	Luanda International School
COTE D'IVOIRE	Morning Glory International School
ERITREA	Asmara International Community School
GABON	International School of Gabon - Ecole Ruban Vert
GHANA	Springforth Community School
KENYA	The Aga Khan Academy, Nairobi
MALAWI	Bishop Mackenzie International School
MAURITANIA	TLC International School
MAURITIUS	International Preparatory School
MOZAMBIQUE	American International School of Mozambique
NIGERIA	Discovery House Montessori School
	IITA International School
SUDAN	Khartoum International Community School
TANZANIA	Aga Khan Mzizima Secondary School
	Dar es Salaam International Academy
	Geita Gold International School
	Genesis Schools Ltd.
	Iringa International School
	Kwanza International School
UGANDA	Acorns International School

AMERICAS

BRAZIL	Avenues: The World School - São Paulo
	Escola Suíço-Brasileira Rio de Janeiro by SIS Swiss International School
	SIS Swiss International School - Brasilia
	The International School of Curitiba
BRITISH VIRGIN ISLANDS	Cedar International School
CANADA	University of Toronto Schools
COSTA RICA	St. Jude School
MEXICO	Escuela Tomas Alva Edison
	Instituto Thomas Jefferson Campus Queretaro, S.C.
	Instituto Thomas Jefferson Campus Santa Monica
	Instituto Thomas Jefferson Palomar
	Instituto Thomas Jefferson Valle Real
	Instituto Thomas Jefferson Zona Esmeralda

USA	Alto International School
	Avenues: The World School
	BASIS Ahwatukee
	BASIS Baton Rouge
	BASIS Chandler
	BASIS Chandler Primary - North Campus
	BASIS Chandler Primary - South Campus
	BASIS Flagstaff
	BASIS Goodyear
	BASIS Independent Brooklyn
	BASIS Independent Fremont
	BASIS Independent Manhattan
	BASIS Independent McLean
	BASIS Independent Silicon Valley
	BASIS Mesa
	BASIS Oro Valley Primary
	BASIS Peoria
	BASIS Peoria Primary
	BASIS Phoenix Central
	BASIS Phoenix Primary
	BASIS Phoenix South Primary
	BASIS Prescott
	BASIS San Antonio Primary - Medical Center Campus
	BASIS San Antonio Primary - North Central Campus
	BASIS Scottsdale
	BASIS Scottsdale Primary
	BASIS Scottsdale Primary - West Campus
	BASIS Tucson North
	BASIS Tucson Primary
	BASIS Washington DC
	Kehoe-France School Northshore
	Kehoe-France School Southshore
	Pine Street School

MIDDLE EAST

JORDAN	The International Academy Amman
LEBANON	Brummana High School
LIBYA	New Vision Academy
QATAR	Al Wataniya International School
	Park House English School
SAUDI ARABIA	Al Faris International Schools
	Al Hussan International Grammar School
	Al Hussan International School - Khobar
	Al Hussan International School - Riyadh
	Al Hussan International School - Yanbu
	Al Hussan Model Girls School - Jubail
	Al Hussan National School - Dammam
	Dhahran Ahliyya Schools
	International Programs School in Al-Khobar (IPS)
	Jubail International School
	Orbit International School

SULTANATE OF OMAN	ABA, An IB World School
	Al Batinah International School
	PDO School
UNITED ARAB EMIRATES	Adab Iranian Private School
	Al Alfiah Filipino Private School
	Al Amaal English High School
	Aspen Heights British School
	Dar al Marefa Private School
	Delhi Private School Ajman
	Dubai International Academy, Al Barsha
	Far Eastern Private School (FEPS)
	Far Eastern Private School/Branch
	German International School Dubai
	His Highness Shaikh Rashid Al-Maktoum Pakistani School Dubai
	MSB Private School
	Nibras International School
	Pakistan Islamia Higher Secondary School, Sharjah
	Raffles World Academy
	Reach British School
	Springdales School Dubai
	The Apple International School
	The Aquila School
	The Indian High School, Dubai
	The International School of Choueifat - Ras Al Khaimah
	The New Filipino Private School
	The Philippine School - Dubai

OCEANIA

FIJI	International School Nadi
	International School Suva
PAPUA NEW GUINEA	The Ela Murray International School