Programme for International Student Assessment (PISA)

Partner focus
World Bank

Regional focus
Latin America
Middle East

Issue focus
Medical testing

International Schools’ Assessment Program

Australian Council for Educational Research
ACER recognises the importance of equipping students, teachers and school leaders with the skills necessary to thrive in a global environment, and has set itself an ambitious agenda for the coming decade to achieve this.

Our agenda is international. The commitment of ACER to providing high quality educational research and services to the international community has always been strong, as demonstrated by the establishment of the Australian Council for Educational Research (India) and ACER's office in the United Arab Emirates. This commitment continues to grow, with the rapid expansion of ACER's work overseas.

*International Developments* presents a showcase of some of ACER's recent international work, to demonstrate the ways in which ACER brings its extensive expertise and international experience to bear on the many and varied challenges of improving educational outcomes throughout the world. Through all our work, ACER strives to provide clearer understandings of the challenges confronting education systems, learning institutions, educational leaders, teachers and learners themselves, and better understandings of the most effective, research-based ways of addressing those challenges.

ACER understands the importance of quality assessment and evaluation of students, teachers and education systems in guiding and informing educational policy. ACER conducts many national and international assessment activities, including the International Schools’ Assessment Program, and leads the consortium for the OECD Programme for International Student Assessment. ACER also works with universities in the United Kingdom and Ireland, among other countries, to develop, manage and evaluate selection tests for undergraduate medical and health-related programs.

ACER is committed to collaboration and the mutual exchange of ideas in the design and implementation of any major educational project, and works closely with local and international organisations and national governments to ascertain needs and implement programs in culturally and socially appropriate manner. To highlight this ethos, this issue of *International Developments* will focus on some of ACER's regional achievements and organisational partnerships.

ACER also firmly believes that education is a key aspect of development in less advantaged countries and communities, and is closely involved with the international educational development sector. ACER has undertaken projects through UNESCO, AusAID and the World Bank to supply educational consultancy services based on international best-practice to less developed countries.

All of ACER's work, including that discussed in *International Developments*, is aligned with our ongoing commitment to ensuring that all students, regardless of circumstance and nationality, have access to a quality education.
CONTENTS

Programme for International Student Assessment (PISA)

Partner focus
World Bank

Regional focus
Latin America

Regional focus
Middle East

International Schools' Assessment Program

Issue focus
Medical Testing
Programme for International Student Assessment (PISA)

ACER leads an international consortium of research organisations, and educational institutions to deliver the International PISA project on behalf of the Organisation for Economic Cooperation and Development (OECD).

Translated into 48 languages and then verified to ensure they can be understood by students from a wide range of language and cultural backgrounds, PISA questions are based on relevant, everyday situations. PISA tests the reading, mathematics and science literacy of 15-year-olds across the world. In 2009 around 400 000 students from 57 countries took part.

The OECD established PISA, which is a means of assessing and comparing education systems worldwide, after discovering it had a number of economic measures of its member countries but no measures of educational achievement. By testing the skills and knowledge of 15-year-olds in three core subject areas, PISA determines how capable students are at applying their skills and knowledge to real-life problems and situations, and whether they can analyse, reason and communicate their ideas effectively. By assessing students at the age when they are nearing the end of compulsory schooling, PISA ascertains whether students are prepared for the challenges of life as young adults.

Since 2000, PISA has been conducted every three years. The continuous cycle of PISA allows for longitudinal trends in educational performance to be monitored.

The PISA test includes questions on a particular subject area accompanied by stimulus material, which may include text, diagrams or images, and is followed by a questionnaire that asks students about their attitudes and background. This questionnaire seeks to gain information about students’ home and school environment to identify possible influences on school achievement. The questions used in PISA are carefully developed and selected. Expert groups are consulted, ideas are discussed among participating countries and advice is sought from various boards and groups. Every item included is rated by each country in terms of potential cultural, gender or other biases, as well as the relevance to 15-year-olds’ familiarity and level of interest. The questions are tested in field trials in participating countries before they are considered to be part of the main PISA study.

When PISA is conducted every three years a nationally representative sample of 15-year-olds is chosen from each participating country. The sample is carefully designed to ensure that PISA provides an accurate snapshot of educational achievement of the full 15-year-old population.
Once the tests are completed a team of specially trained markers checks them. The data is then sent back to the PISA consortium and collated with that of other countries to create an international database. The database created provides a multitude of information that may eventually be used to inform educational policy in participating countries. Information from the attitude and background questionnaire is used to analyse potential influences on students’ performance across and within countries.

The data collected by PISA shows the successes of schools in some countries, and the challenges faced by others. It allows countries to compare best practices and to further develop an educational reform agenda appropriate for their particular school system.

ACER’s work on PISA includes:
- Leading the development and devising the methodology of procedures required to implement the PISA survey in all 57 participating countries.
- Developing and implementing sampling procedures and assisting with monitoring sampling outcomes across participating countries.
- Leading the development of all assessment instruments in Reading, Mathematics, Science, Problem Solving, Computer-based testing, background and contextual questionnaires;
- Developing purpose-built software to assist in sampling and data capture; and
- Analysing and assisting the OECD to prepare the international report.

Example question from PISA

**BRAKING**

The approximate distance to stop a moving vehicle is the sum of:
- the distance covered during the time the driver takes to begin to apply the brakes (reaction-time distance)
- the distance travelled while the brakes are applied (braking distance)

The ‘snail’ diagram below gives the theoretical stopping distance for a vehicle in good braking conditions (a particularly alert driver, brakes and tyres in perfect condition, a dry road with a good surface) and how much the stopping distance depends on speed.

If a vehicle is travelling at 110 kph, what distance does the vehicle travel during the driver’s reaction time?
Canada

- Canada’s PISA results reflect the country’s strong education system.
- PISA has contributed to the strengthening of assessment systems in core subject areas.
- Relatively lower PISA results in some provinces have led to the introduction of new research and assessment initiatives.

Canada was drawn to take part in PISA because it is not just a global benchmark that ranks the success of education systems around the world, but looks at the preparedness of students as they embark on post-secondary studies or enter the workforce. While provincial, territorial and national systems of assessment in Canada are most closely related to school curricula, PISA focuses on life skills, which are fundamental in a global economy.

Canada’s PISA results have been relatively good so most jurisdictions have not felt the need for significant education reforms based on PISA. However, in some jurisdictions PISA has contributed to the strengthening of assessment systems, mostly in core subject areas. Provinces that showed relatively lower results in PISA 2000 and PISA 2003 have introduced new research and assessment initiatives.

Information courtesy of PISA National Project Manager for Canada.

Dubai

- Newcomer to the PISA program.
- Taking part in PISA to compare its national educational performance internationally.

For Dubai, PISA generates consistent, high quality indicators of student knowledge in reading, mathematics and science at a point where compulsory schooling is at or nearing an end. PISA also helps identify weaknesses and strengths in the country’s schooling system in some key areas such as education standards, national student performance, curriculum structure and content, and school administration. It also allows Dubai to compare its education system internationally.

Dubai is a relative newcomer to PISA, having taken part for the first time in 2009. The emirate is still working through the results of that first cycle.

Information courtesy of PISA National Project Manager for United Arab Emirates.

Chile

- Taking part in PISA allows Chile the opportunity to be on par with developed nations.
- PISA has indirectly influenced the development of the school curriculum in Chile.

Chile has a long tradition of assessment. National testing has been conducted in the South American country for more than a decade, providing schools and administrators with valuable feedback concerning what needs to be done to improve student learning. However, national tests are not enough to give a full understanding of a country’s education system. International studies such as PISA allow Chile to be part of a global movement that looks at how students perform with the knowledge they acquire about the present and future world. Assessments such as PISA are invaluable for nations like Chile, which seek to provide better possibilities for their citizens.

Participating in PISA has allowed Chile to put its education system under international scrutiny as well as enable data to be collected about student performance to inform policy makers and educators. PISA has indirectly influenced curriculum experts in Chile to develop progress maps and, in turn, new curriculum adjustments through its framework.

Information courtesy of PISA National Project Manager for Chile.
Established in 1944, the World Bank provides low-interest loans, interest-free credits and grants to developing countries for investment in education, health, public administration, infrastructure, financial and private sector development, agriculture and environmental and natural resource management. One of the organisation’s strategic goals is to help countries integrate education into national economic strategies and develop holistic education systems responsive to varying socioeconomic needs.
ACER’s World Bank-funded work extends from India to Ethiopia on projects involving national assessments, reviews and in-country consultancy.

ACER is currently working on a World Bank commissioned project in Tajikistan to establish a National Assessment Centre (NTC). The NTC will manage the implementation of a sustainable system of university entrance, as well as the expansion, improvement and better use of national tests and the growth of an assessment culture that allows students at all grade levels to be tested. Once established, the NTC will provide Tajikistan with a fresh approach to educational standards. The funding for the project has been allocated by the Russia Education Aid for Development (READ) program, a collaboration of the Government of Russia and the World Bank.

The World Bank has also engaged ACER to work with the Directorate of Primary Education (DPE) in Bangladesh following recent primary school curriculum reform. After a national sample assessment of students in grades 3 and 5 was conducted by the DPE in 2006, ACER stepped in to provide advice and quality assurance of the national primary assessment. ACER’s consultancy involves providing short-term practical support to the DPE in delivering an improved assessment program in 2010 and identifying long-term strategies to support capacity-building within the system. The practical nature of the consultancy work focuses on delivering a world-class, system-wide assessment program for Bangladesh primary education.

Further assistance is being provided to improve the Bangladesh education system at the secondary level as well. ACER is working with the government to develop a national assessment system that will measure student learning in secondary and higher-secondary schools and in turn evaluate the performance of the education system. As well as monitoring the health of the secondary education system, the Secondary School Quality Learning System Assessment (SSQLAS) will provide data for policy makers, provide feedback for curriculum development, build local capacity and enable comparisons with relevant international standards. ACER is providing expertise and skills to the Bangladesh National Learning Assessment Board (BANLAB) with the aim of embedding a world-class assessment culture in the country.

In 2007 ACER began working with the Indian Government to help strengthen its national assessments. The Sarva Shiksha Abhiyan (SSA) - translated from the Hindi as ‘Education for All’ - is a large, World Bank-sponsored reform project and part of the government’s plan to provide universal-sponsored reform project and part of the government’s plan to provide universal elementary education through community ownership of the school system. ACER was commissioned to prepare a technical note for the project, which includes advice on increasing learning under the SSA project as well as strategies to boost school attendance.
ACER works closely with Latin American countries, particularly Mexico, to assist governments and institutions with the implementation of educational reform.

In 2010 ACER is undertaking an Evaluation of Secondary Curriculum Reform in Mexico (ESCRiM) for the Secretaria de Educacion Publica (the national Ministry of Education in Mexico). The project involves an evaluation of curriculum reform that the Secretaria de Educacion Publica (SEP) Ministry of Education developed in 2006 and which has now been rolled out across the nation. The evaluation, which will focus on mathematics, science and Spanish, aims to find out whether teacher practice has changed as a result of the curriculum reform and to consider the role professional development has played in assisting teachers.

To support ESCRiM, ACER is also working with SEP to develop a test for students in grades 8, 9 and 10 that incorporates items from the Programme for International Student Assessment (PISA). This national testing project, SEP-ISA, will allow SEP to compare Mexican students’ achievement with data gathered from PISA 2006 and provide a progress monitoring tool.

Since 2002 ACER has provided consultancy services to Chile’s Ministry of Education. The current work involves the development of a standards-based curriculum and assessment system in the South American country. The project’s focus is on refining outcomes frameworks for mathematics, science, social studies and English. ACER is also providing assistance to align the national monitoring program, Sistema de Medición de la Calidad de la Educación (System for Measuring the Quality of Education, or SIMCE), with the standards and to set cut scores on the SIMCE tests.

ACER has also provided assistance to the Colombian Institute for the Promotion of Higher Education (ICFES), through a sub-contract with ALMA MATER (Network of Public Universities in the Coffee-Growing Zone). The 2008 project involved providing technical assistance in defining a set of labour competencies required to write assessment items, the developments of tools to evaluate these items and training and accreditation of test developers, item writers and reviewers. Senior researchers from ACER spent two weeks in the capital, Bogota, to deliver the training workshops.

The commitment of Latin American countries to measuring and improving education standards is also indicated by the number of states participating in the OECD’s Programme for International Student Assessment (PISA). Several Latin American nations are involved in PISA 2009 and PISA 2009 Plus, including Brazil, Chile, Panama, Argentina, Colombia, Mexico, Peru, Venezuela and Costa Rica.

Regional focus

Latin America

The nations of Latin America have set an ambitious agenda to lift educational standards to ensure students are prepared for life and work in the 21st Century.
The countries of the Middle East are forging ahead with educational development to ensure that their students are well prepared to meet the challenges of living and working in a global economy.

ACER’s United Arab Emirates Office, located in Dubai and headed by Manager Alan Egbert, opened in October 2003 as the first educational research organisation in Knowledge Village. ACER UAE provides knowledge transfer, training and innovative educational services throughout the Middle East.

Most recently, ACER entered into an agreement with Imam Muhammad bin Saud Islamic University in Saudi Arabia to help establish a Centre for Evaluation and Assessment. Once established, the new Centre will influence the educational theory and practice of the University, and will potentially improve and invigorate higher education throughout Saudi Arabia and further afield.

In 2008, the Knowledge and Human Development Authority of Dubai contracted ACER to implement the Organisation for Economic Cooperation and Development’s Programme for International Student Assessment (PISA). The study assessed the preparedness of the 15-year-old student population in both public and private schools in Dubai. More than 150 schools and 5500 students participated in the study.

The UAE Ministry of Education, recognising the value of benchmarking students internationally, has subsequently become involved in PISA, and in 2010 ACER is implementing PISA Plus 2009 throughout the United Arab Emirates. Along with most of the Gulf Cooperation Council (GCC) countries, in 2007 Dubai participated for the first time in the Trends in International Mathematics and Science Study (TIMSS), which tests students in grades four and eight in mathematics and science. ACER was contracted by the Knowledge and Human Development Authority to assist with training, data analysis, development and writing of the Dubai TIMSS reports, and to provide consultancy on the implementation of policy recommendations stemming from the reports. For the first time in Dubai, educational providers and policy makers were provided with extensive and invaluable data sets on the performance and achievement levels of public and private students in core subject areas. In 2011, the UAE will participate in TIMMS as a country-wide study.

The International Benchmark Test (IBT) in English, mathematics and science was designed by ACER, to enable student achievement levels in grades 3 to 10 to be benchmarked against local, national and international standards. Each year more than 15,000 students across the GCC countries participate in this assessment.

The English language is another core subject area that Middle Eastern countries consider an important part of an internationally competitive educational system. Specifically designed for the national population of the UAE, the English Language Skills Assessment (ELSA), developed by ACER, is a secure web-based English language proficiency test that...
provides instant feedback to teaching staff on the nature of support required for individual students. ELSA is the first comprehensive English language test in the Middle East region to be developed specifically for an Arabic speaking population that tests reading, writing and listening in an online format. It is used extensively by the Abu Dhabi Vocational Education and Training Institute as a selection test for admissions purposes as well as an instrument for placing students in appropriate educational programs.

ACER has also been involved in monitoring innovative educational delivery methods in the region, including the Abu Dhabi Educational Council (ADEC) Private Public Partnership (PPP) program, under which the management of several government schools in Abu Dhabi were taken over by external education providers. A mandated part of the program was the external assessment of student performance and to achieve this ACER was contracted to administer tests in English, mathematics and science across all grade levels in 2006. For the purpose, ACER developed tests in Arabic that were linked to the ADEC Standards to provide the first baseline assessment data to the PPP Providers and the Council.

Further to ACER’s extensive work with the OECD and the International Association for the Evaluation of Educational Achievement (IEA) in conducting international testing, is the organisation’s experience in developing national tests to address the specific educational goals of a country. To this end, ACER developed the National Assessment of Student Achievement and Progress (NASAP) in partnership with the UAE Ministry of Education in 2003. It was the first evaluation program of its kind in the Middle East and constituted the national assessment of grades 3, 5, 7 and 9 in the core subject areas of Arabic, English, mathematics and science. It involved the establishment of the Centre for Evaluation, Testing and Measurement (CETME) in Abu Dhabi. More than 25,000 national students participated in the test, which was hailed a pioneering success and has been attributed as being the catalyst for the education and curriculum reform that started in the UAE from 2004 onwards.

ACER was further involved in this reform by assisting in the development of the UAE’s national curriculum in 2004-05 and training staff from the Ministry of Education’s Curriculum Centre. The new curriculum stated explicit standards for each year level with outcomes and indicators of performance.

While this overview of projects that have been completed or are currently being undertaken by ACER in the Middle East is by no means exhaustive, it demonstrates the scope and variety of ACER’s experience in the region to date.
International Schools’ Assessment Program

Designed and developed by ACER, the International Schools’ Assessment Program (ISA) is currently administered in 260 international schools worldwide with over 49,000 students participating, and allows these schools to benchmark themselves against other international schools in the core skill areas of mathematical literacy, reading and writing.
The ISA is a culturally inclusive test that provides meaningful and valuable information for education providers and the parents of students. It enables the identification of areas for improvement at the school, classroom and individual student level, while allowing for the comparison of schools against international standards. Using ISA, schools, teachers and students can set themselves targets for the improvement of learning outcomes, and measure this improvement over time.

The ISA program, which assesses students in grades 3 to 10, has been specially developed to suit the wide variety of cultural backgrounds usually found in international schools, which are located in Asia, Europe, Africa, Oceania, the Americas and the Middle East. Additionally, ISA test materials are based on the Programme for International Student Assessment (PISA), allowing comparisons with PISA results for reading and mathematics to be made for grade 8, 9 and 10 students. ISA scores are scaled to enable schools to directly compare results from any ISA tests in order to track changes in student performance across grade levels and over time.

Like PISA, the ISA is not just a multiple choice test. Half the questions in the reading and mathematical literacy tests are open questions that require students to generate meaning, explain their reasoning, find evidence and justify their opinions. This allows the ISA to assess a broad range of English literacy and mathematical literacy skills, including reading skills such as retrieving, interpreting, reflecting and evaluating, and mathematical concepts such as uncertainty (related to data and probability) as well as change and relationships (related to algebra and functional relationships). The ISA also includes two writing tasks: a narrative task and an argument.

From the ISA data, ACER produces a detailed set of reports, and provides assistance with the interpretation of the reports. The ISA results can be used in a number of ways by parents, teachers and schools to evaluate and improve outcomes for students as described below:

**The ISA Individual Reports** show parents the level at which their child is performing overall in mathematical literacy and reading and writing, compared with other students at the same grade level in other international schools. The report also helps parents to identify the skills their child has mastered and those that they need to develop. Parents can also track their child’s progress over time.

**The ISA Class Reports** allow schools to identify trends over time, check the reliability of their internal assessments and monitor individual student and grade level performance against other international school students who have participated in the ISA. The ISA Class Reports also give teachers detailed information about the kinds of skills their students have mastered and those they need to learn.

**The ISA School Reports** give school administrators summary statistics to allow them to compare their performance at each grade level with all the other schools that participated in the ISA and with other “like schools” – those with a similar percentage of students from non-English speaking backgrounds. Approximately 63 per cent of students taking part in ISA are from non-English speaking backgrounds. The School Report can be used to identify areas of strength or weakness in student performance, which allows for targeted school reform and ultimately improved learning outcomes.

**The ISA Interactive Diagnostic Report** helps school leaders and teachers to interpret and use the ISA data to inform improvements in teaching and learning by showing a school’s current ISA results in a range of graphic displays. This makes it easier to identify trends and patterns in comparison with all other ISA schools. Paul Morris from the International School of Stuttgart has found this to be the case, and notes that the ISA Interactive Diagnostic Report ‘was very useful in identifying individual student needs following the question by question breakdown and helped us to identify gaps in our own internal assessments.’

**The ISA Interactive Tracking Report**, introduced in 2009, allows a school 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 for student performance. With this report it is possible to monitor, over a number of calendar years, whether student performance has changed in relation to these benchmarks. This report is recommended for schools that have participated in ISA programs for at least three administrations.

Yuri Shamilov of the Moscow Economic School says, ‘ISA became one of the most valuable indicators for the Board of the Moscow Economic School of our students’ development.’ Mark Jenkins of the Jakarta International School further adds that, ‘the ISA has become an important external measure of our school’s performance and is part of our strategic measurable objectives.’

Extensive support material is available to help schools to use their ISA data to inform and improve their teaching programs. These include the Guide to Reports, Diagnostic Interpretations of the ISA Data for Classroom Teachers, Benchmark Interpretations of the ISA Data for Classroom Teachers and A Guide to Interpreting the ISA Data for School Leaders and Administrators. ACER also responds quickly and in a detailed manner to emailed queries about data interpretation, so that schools can get the most from the ISA.
ACER developed the GAMSAT (Graduate Australian Medical School Admissions Test), which is used by universities in Australia to select students for graduate medical programs, and is now also utilised in the United Kingdom and Northern Ireland. GAMSAT UK is used exclusively by such universities as St George's University of London and Nottingham University for entry into medicine and dentistry courses. GAMSAT Ireland, another adaptation of the test, was developed for the selection of medicine and veterinary medicine students at five universities in Ireland.

GAMSAT evaluates the ability of students to understand and analyse material, think critically about issues and organise and express thoughts in a logical and effective way. Problem solving is a major focus of the test.

ACER has also developed, in consultation with the University of Ulster in Northern Ireland, the Health Professions Admissions Test (HPAT), which assesses a range of attributes considered to be important for the study and later practice of the health professions. HPAT has been designed to complement academic achievement by providing assessment of skills in the areas of reasoning, understanding and working with people and written communication. An additional test, HPAT-Ireland, is used by medical schools in Ireland to measure logical reasoning and problem solving, interpersonal understanding and non-verbal reasoning. Both HPAT and HPAT-Ireland place a strong focus on general skills and personal abilities and do not test academic knowledge.

In Australia and New Zealand ACER conducts the UMAT (Undergraduate Medicine and Health Sciences Admissions Test) to assist in the selection of candidates for study in medicine, dentistry and health science programs at universities. UMAT was designed to assess general attributes and abilities gained through prior experience and learning. Specifically, UMAT focuses on critical thinking and problem solving, and understanding people and abstract non-verbal reasoning. These abilities are considered crucial for students in their studies and later practice of professions in the health sciences. Students complete the test during their final year of schooling.
Australian Council for Educational Research

The Australian Council for Educational Research (ACER) is one of the world’s leading educational research centres.

For 80 years ACER has developed a solid reputation as a provider of reliable support to education policy makers and professional practitioners. ACER’s extensive research capacity is conducted across ten research programs:

- Transitions and Policy Analysis
- Assessment and Reporting (Humanities and Social Sciences)
- Assessment and Reporting (Mathematics and Science)
- National Surveys
- International Surveys
- Systemwide Testing
- Teaching, Learning and Leadership
- Program Evaluation
- Higher Education
- Psychometrics and Methodology

As a not-for-profit organisation independent of government, ACER receives no direct financial support and generates its entire income through contracted research and development projects and by developing and distributing products and services. The organisation has offices throughout Australia, as well as branches in Dubai and New Delhi.

**International influence**

ACER works in an increasingly international context, providing research and assessment services, consultancy, support and professional development programs to governments and educational organisations in numerous countries. In addition, ACER develops, implements and evaluates regional, national and international assessment programs for a broad range of international clients.

ACER is engaged in significant collaborative work with the Organisation for Economic Co-operation and Development (OECD) as the leading partner in a consortium responsible for the OECD’s Programme for International Student Assessment (PISA). More recently, ACER became involved in leading the OECD’s Assessment of Higher Educational Learning Outcomes (AHELO) and will lead an international consortium for a feasibility study this year.

ACER also collaborates on a number of international development projects with organisations such as the World Bank, AusAID and the United Kingdom Department for International Development (DFID), contributing to educational evaluation and reform in a number of countries.

Further, ACER is the International Study Centre responsible for the IEA International Civic and Citizenship Education Study (ICCS) and jointly conducts the IEA Teacher Education Development Study (TEDS) with Michigan State University.
**One Laptop Per Child (OLPC) - Evaluation in the Solomon Islands**

In 2010, ACER was commissioned by the Ministry of Education and Human Resource Development (MEHRD) in the Solomon Islands to conduct an evaluation of the One Laptop Per Child (OLPC) trial project. The evaluation was aimed at identifying the impact of the program on such aspects of schooling as student attendance, teaching and learning. ACER trained several Solomon Islands staff to conduct interviews with teachers, students, parents and community members. The findings were then analysed by ACER with input from the interviewers. The evaluation showed that students at the three pilot schools had benefited from involvement in the program. Although the report identified some issues for improvement, such as technical problems with the laptops, a lack of resources to service the laptops and the need for additional training for teachers, feedback from the three participating school communities was very positive.

**Programme for International Assessment of Adult Competencies (PIAAC)**

PIAAC is an international adult literacy study, commissioned by the OECD, which will be carried out over a three-year cycle. The first cycle will be held in 2011 in about 24 countries. The assessment will involve a household survey of adults aged between 16 and 64 years, linked with previous international surveys such as the International Adult Literacy Survey and the Adult Literacy and Lifeskills survey. PIAAC will access proficiency in literacy (reading), numeracy and problem-solving in a technology-rich environment. The assessments will be computer-delivered in all three domains, supplemented by paper-based components in literacy and numeracy. The international consortium that is managing the assessment on behalf of the OECD has commissioned ACER to develop all of the new literacy tasks for PIAAC, drawing on both original development and on contributions from participating countries.

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**Examples of ACER’s current international projects**
### Brunei Link Study

The Brunei Link Study is a continuation of the work that ACER began with the Brunei Ministry of Education through the development of the National Study of Student Competencies in Mathematics and English in 2008. The first stage of this work assessed students in Grades 4, 6, and Secondary 2. The current stage, taking place in 2010, is an assessment of students in Secondary 4, which will also be a longitudinal study of the students who were in Secondary 2 in 2008. The project is linked to the OECD’s Programme for International Student Assessment (PISA) through the inclusion of some released PISA mathematical literacy and reading literacy items in the tests. ACER is working in close cooperation with the Ministry of Education and providing training in item development, data management and data analysis at appropriate stages of the project.

### España International Student Assessment

In 2010 the Universidad Complutense de Madrid (UCM), on behalf of the Comunidad de Madrid (Regional Authority of Madrid), is using tests prepared by ACER to assess the mathematics and Spanish reading skills of students in grades 4 and 8. The España International Schools’ Assessment (ESP-ISA) consists of items from ACER’s International Schools’ Assessment (ISA) item bank, along with some released Programme for International Student Assessment (PISA) items, ensuring that the results can be related to PISA standards. As well as the test forms and the ISA items, ACER will provide UCM with coder training and consultancy on data analysis and report generation.

### The Quality of Education in Madrasah, Indonesia

The Quality of Education in Madrasah (QEM) study, which commenced in 2009, aimed to provide high quality research into various dimensions of education in Indonesian Madrasah (Islamic Schools). Now in its final stage, a draft version of the research report has been submitted and follow-on consultancy work has begun with Indonesia’s Ministry of Religious Affairs to assist with additional analysis and application of the study’s findings. The study focused on final year students in Islamic Junior Secondary Schools, known as Madrasah Tsanawiyah (MTs). About 150 MTs were sampled from across Indonesia. Eight research instruments were developed for use in the study, including four achievement tests designed to assess performance in mathematics, science, Indonesian and English. ACER’s School Life Questionnaire (SLQ) was also used as an effective measure of school quality.