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The Australian Council for Educational Research (ACER) is one of the world’s leading educational research centres. Our mission is to create and promote research-based knowledge, products and services that can be used to improve learning across the lifespan. Since it was established in 1930, ACER has built a strong reputation as a provider of reliable support and expertise to education policymakers and professional practitioners.

ACER is a not-for-profit organisation working to improve learning outcomes, including for students in developing contexts. ACER’s team of highly skilled educational researchers are experts in large-scale assessment, education policy, curricula, and teaching and learning.

Our development work is funded through strategic partnerships across the international development sector, including with governments, international agencies and philanthropic organisations. In the last five years alone, ACER has worked alongside partners to improve the quality of learning for children in over 40 countries, through more than 120 international development projects. Researchers in our global offices have extensive experience working in the Asia-Pacific region, the Middle East, Africa, Europe and Australia. Local staff have in-depth understanding of regional educational policies and contexts.

ACER conducts, supports and uses research to improve student learning in low- and middle-income countries. Our work supports children in countries facing a range of socio-political issues, economic challenges and natural disasters. We focus on three key areas: getting the foundations right during the early years; improving teaching and learning; and building better systems to support student learning outcomes.

ACER continues to work with its partners to minimise the effects of COVID-19 on education across the globe. The Australian Strategic Partnerships in Remote Education (ASPIRE) initiative that connects Australian expertise in remote education with partners in the Indo-Pacific region is just one of our projects enhancing global responses to the pandemic.

ACER led the Programme for International Student Assessment (PISA) from 2000 until 2012, and continues to conduct the Australian component and provide support to countries new to the program. ACER is currently supporting 21 countries to strengthen their national assessment programs and is a recognised partner in all areas of large-scale assessment – both regionally and nationally – for United Nations Children’s Fund (UNICEF) countries in the Asia-Pacific region.

The Global Education Monitoring (GEM) Centre is a long-term partnership between ACER and the Australian Government’s Department of Foreign Affairs and Trade (DFAT). The GEM Centre drives improvements in learning by supporting the monitoring of education worldwide.

ACER brings a rigorous and research-based orientation to the focus of Sustainable Development Goal 4 on measuring learning outcomes. ACER is an official partner of the United Nations Educational, Scientific and Cultural Organization (UNESCO). The GEM Centre provides technical support to the UNESCO Institute for Statistics (UIS), which monitors the progress of countries against SDG 4 through the Global Alliance to Monitor Learning (GAML).

In this issue of *International Developments*, we showcase some of our projects that are helping to improve learning outcomes in low- and middle-income countries. We cover a range of key areas – from learning assessments and capacity development to professional learning and program evaluation – that aim to improve the education of children from early childhood to secondary school. We explore important themes such as inclusive education and the education of girls in challenging contexts.

This issue also features our work to support education systems impacted by COVID-19 and takes an in-depth look at how ACER enables education stakeholders to monitor progress towards achieving the SDGs. We hope you enjoy reading about how ACER’s work is improving learning in a range of contexts.
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- Investigating the impact of learning through play at school
Measuring where students are at in their learning is critical for determining whether the world is on track to meet SDG 4. ACER’s contribution to SDG 4 is spearheaded through the work of the GEM Centre, a long-term partnership with the Australian Government’s Department of Foreign Affairs and Trade (DFAT). At the core of the GEM Centre’s contribution is the development of technically sound and internationally comparable learning metrics that enable education stakeholders to align assessment systems with global SDG monitoring and reporting.

The GEM Centre provides technical support to the United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics (UIS), which has been mandated to monitor the progress of countries towards SDG 4 through the Global Alliance to Monitor Learning (GAML). Descriptions of Minimum Proficiency Levels (MPLs) in reading and mathematics enable countries to report national or regional level student outcomes at the end of lower primary, primary and lower secondary levels, as required by SDG indicator 4.1.1.

The GEM Centre has developed a method for aligning existing assessment program outcomes with the global MPLs. This quantitative method, involving systematic comparison of items from a variety of assessment programs, allows countries to use their own regional or national student assessment results to report against SDG 4.1.

‘The GEM Centre’s method for aligning existing assessment programs has been successfully used to map the 2019 Pacific Islands Literacy and Numeracy Assessment (PILNA) against Minimum Proficiency Levels in reading and mathematics,’ says Maurice Walker, ACER’s Research Director, Education Policy and Practice.

‘The GEM Centre has also provided technical guidance to align the Southeast Asia Primary Learning Metrics (SEA-PLM) proficiency scales with the MPLs in reading and mathematics, enabling the performance of Grade 5 students in six countries in Southeast Asia to be reported against SDG 4.1.’
The GEM Centre is working to ensure that learning standards are defined and described in a meaningful way for policymakers and practitioners. To this end, the GEM Centre has contributed to the development of expanded descriptions of the MPLs in reading and mathematics for the end of lower primary (SDG 4.1.1a), end of primary (SDG 4.1.1b) and end of lower secondary (4.1.1c) indicators. In 2019 and 2020, the GEM Centre sponsored papers to the GAML, outlining recommendations to modify the definitions of sub-goals.

The GEM Centre advocates for the use of ACER’s learning progressions in reading and mathematics to further define and elaborate the continuous development that underpins the MPLs. ACER’s learning progressions can be used to define, monitor and report the learning outcomes of school-aged children, from the earliest stages of schooling to the end of middle secondary school.

A common definition of learning underpinned by a common learning progression enables common benchmarks to be established across different contexts. When combined, a common understanding of learning and benchmarks provides the opportunity to define policy targets for learning across contexts and over time, and to understand the learning progress within education systems and classrooms, and of individual children.

Representing the GEM Centre, ACER assessment experts are members of the mathematics and reading working parties convened by the UIS and United States Agency for International Development (USAID), to determine the content of the Global Proficiency Frameworks (GPFs). The GPFs are sets of descriptions of what it means to meet the mathematics and reading levels appropriate for Grade 1 to Grade 9.

ACER’s learning progressions in mathematics and reading have been important tools in shaping the GPFs, as they are based on empirical evidence of student achievement from multiple national and international assessments. Sponsored by the GEM Centre, ACER researchers are part of the Policy Linking coordination group, which meets regularly to monitor and share information about policy linking activities being piloted using the GPFs in several African and Asian countries.

The GEM Centre is providing expert technical support for the setup of the Global Item Bank, an initiative of the UIS. The Global Item Bank is a set of assessment items available to education systems to facilitate linking of national assessments for the purpose of reporting assessment results against SDG 4.1.1. The GEM Centre has developed and donated a large number of mathematics and reading items to the Global Item Bank.

As a member of the GAML taskforce, the GEM Centre is also helping to develop strategies to gather evidence on the literacy and numeracy levels of adults and young people (SDG indicator 4.6.1), to objectively measure outcomes. It is working to set benchmarks for adult literacy and numeracy based on ACER’s learning progressions and to influence the UIS and UNESCO Institute for Lifelong Learning to use formal assessments and observations to monitor progress towards SDG 4.6.

Through a number of important initiatives and close partnerships with global, regional and national education stakeholders, the GEM Centre is supporting progress towards the SDGs and ultimately, helping to improve learning outcomes for children and adults around the world.

Further reading
Learn more about the GEM Centre: acer.org.au/gem/
Read the ‘Minimum Proficiency Levels Described, Unpacked and Illustrated’ paper submitted to the GAML: research.acer.edu.au/monitoring_learning/47/
Building partnerships in remote education during COVID-19

ACER is helping to build resilient education systems through a new initiative that connects Australian expertise in remote education with partners in the Indo-Pacific region.

More than two billion students have been impacted by the COVID-19 pandemic, with school closures affecting around 80 per cent of the world’s student population (UNESCO, 2020). Disruptions to education systems due to COVID-19 pose a real threat to the learning, skills and human development priorities of Indo-Pacific countries. Through well-planned responses from governments, there is an opportunity to build more inclusive, efficient and resilient education systems.

Australian Strategic Partnerships in Remote Education (ASPIRE) connects Australian experience and expertise in remote education with partners in the Indo-Pacific region to provide learning continuity, access and equity, in particular for disadvantaged students. Managed by ACER on behalf of the Australian Government’s Department of Foreign Affairs and Trade (DFAT), ASPIRE aims to contribute to immediate and long-term educational and economic benefits for the Indo-Pacific region.
ASPIRE is supporting a limited number of partnerships to assist Indo-Pacific partners to build or expand on their existing remote education programs. A small grants process facilitates the establishment of these partnerships.

Indo-Pacific governments and educational institutions interested in accessing Australian expertise are being identified through ASPIRE. These Indo-Pacific partners are connected with Australian institutions with proven models, tools and resources in remote education that can assist them to develop a proof of concept. This is based on the individual context, systems and policies of the Indo-Pacific partner.

‘The great thing about ASPIRE is that it is demand-driven,’ says Dr David Coleman, DFAT Senior Education Advisor. ‘It responds to requests from Indo-Pacific partners wanting to access Australian experience and expertise. This ensures that partnerships are relevant and that Australian tools and services provided through ASPIRE are tailored to local educational, cultural and technological contexts.’

ASPIRE supports Indo-Pacific partners to lead and implement high-quality, innovative and evidence-based remote teaching and learning approaches that align with, and add value to, existing education initiatives. It also provides them with access to Australian knowledge, experience and expertise in remote education, enhancing their current responses to COVID-19.

Through ASPIRE, Australian partners are able to collaborate and share their expertise and innovations in remote education with Indo-Pacific partners. They can also build partnerships to endure beyond the life of ASPIRE.

As part of ASPIRE, ACER conducted a review of the evidence on what works in remote schooling. The review draws on international literature and lessons from Australia to inform educational responses to COVID-19. The literature review found that Australian remote education programs are most effective when they incorporate five key principles: support for teachers; parental involvement; student engagement; community partnerships; and inclusion and equity.

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‘Australia’s experience in distance and remote teaching and learning provides relevant insights into effective models and enabling conditions for developing a long-term response to remote learning practices,’ says Jeaniene Spink, Research Director of ACER’s Education and Development research program.

‘In particular, remote and distance learning models applied in Indigenous settings can offer some helpful lessons in effective mechanisms for delivery, including partnerships and engagement with parents and the community.’

One of Australia’s key strengths is in developing evidence-informed policies and institutional mechanisms to support effective remote education programs, including standards and regulatory frameworks. Australia also has extensive experience in implementing learning models and approaches that place students and their wellbeing at the centre of learning.

Australia is known for its collaborative and multi-agency approach to strengthening education systems; most recently demonstrated by its rapid shift to remote education during the initial stages of COVID-19. This has involved strong collaborative coordination between federal and state departments of education (and health), schools, Technical and Vocational Education and Training (TVET).

Through ASPIRE, Australian partners will draw on these experiences and the key principles to support the individual needs of Indo-Pacific partners.

‘The pandemic has created a unique situation where Australian experiences and expertise can add value to existing responses in the region,’ says Ms Spink. ‘Through ASPIRE, Australian and Indo-Pacific partners can learn from each other and create new and exciting possibilities for remote education in the region.’


Further reading

Learn more about the ASPIRE project at: dfat.gov.au/aid/topics/investment-priorities/education-health/education/stability#aspire

Read the literature review at: research.acer.edu.au/learning_processes/32

Results released from the Southeast Asia Primary Learning Metrics (SEA-PLM) 2019 show alarming inequities in learning outcomes for children. While some students are excelling, others are falling far behind and are unlikely to catch up. Without foundational skills in reading, mathematics and writing, these students are likely to be disadvantaged well into their adult lives.

The SEA-PLM 2019 results found that 1 in 3 children in Grade 5 are still performing at the level expected in early primary school. In some countries, the percentage of children able to do the basics in literacy and numeracy is as low as just 2 per cent.
SEA-PLM is the first large-scale regional assessment of Grade 5 students for countries in Southeast Asia. The assessment uses reliable data and evidence to monitor learning outcomes in six Association of Southeast Asian Nations (ASEAN) countries – Cambodia, Laos PDR, Malaysia, Myanmar, Philippines and Viet Nam. It aims to understand what factors facilitate or hinder children’s learning and enable participating countries to track progress on foundational learning (SDG 4.1.1) and to develop and implement policies and programs to improve student learning outcomes.

SEA-PLM 2019 was jointly conducted by the Southeast Asian Ministers of Education Organization (SEAMEO) and the United Nations Children’s Fund (UNICEF), with technical support from ACER. The assessment focuses on learning outcomes across three domains: reading, writing and mathematics. For the first time, global citizenship attitudes, values and behaviours of children (SDG 4.7) were also measured by a large-scale learning assessment at primary education level.

Proficiency scales in reading literacy, mathematical literacy and writing literacy were developed to enable countries to measure and report overall student performance in each of the three domains across contexts and over time. SEA-PLM proficiency scales provide insights into what children can do and, importantly, what they should aim to do next. Understanding that learning is a progression and that teaching must be targeted at the level of students’ abilities is central to understanding the results.

SEA-PLM 2019 found that after five years of schooling, approximately 1 in 5 students are only able to match a single word to a simple picture. Of more concern is that approximately 7 out of 10 students are approaching the end of their primary school education without meeting regional and global standards. This means that many of these students are unlikely to successfully transition to secondary school or engage in further education.

The results also reveal that many students are not demonstrating the mathematics proficiency expected of Grade 5 students. For example, after five years of schooling, approximately 1 in 5 students cannot solve a simple problem requiring them to add two single digit numbers together, or recognise which shape is a triangle.

SEA-PLM 2019 confirms persistent inequities, with children from wealthier backgrounds reaching higher levels of learning achievement than those from lower socioeconomic or disadvantaged contexts. Children who demonstrate a solid grasp of key foundational skills upon entering school consistently outperform those students who do not.

The education levels of parents and teachers also play a role in the learning outcomes of children and highlight the importance of home based support for children’s learning. Approximately one-quarter of all teachers did not receive any training during their pre-service studies on how to teach the fundamentals of reading, writing and mathematics. Gender dynamics are also important, with girls more likely to perform better than boys, regardless of socioeconomic status or school location.

An important first step in addressing the learning gap is to understand what children know and to ensure that teachers have the support needed to effectively transition students from one level of proficiency to the next. SEA-PLM 2019 enables countries in Southeast Asia to gain these invaluable insights into where children are at in their learning and reinforces the importance of teachers, quality data and monitoring, and well-defined curricula.

‘SEA-PLM lays the foundations for policies and practices that will improve learning for all children, no matter their background, gender or ethnicity,’ says Jeaniene Spink, Research Director of ACER’s Education and Development research program. ‘ACER is proud to be involved in the first assessment of its kind in Southeast Asia and in a study that contributes to monitoring and reporting against SDG 4.1.’

SEA-PLM 2019 provides a set of policy recommendations to help address the learning gap. It strongly recommends an increase in access to early learning opportunities – in particular for disadvantaged children – improving school support, teacher education and policies, and increasing alignment of curriculum, assessment and pedagogies.

The recommendations include improving the capacity of governments to use data to monitor and better understand where children are at in their learning. It also encourages the use of SEA-PLM 2019 data and invites all countries in Southeast Asia to participate in SEA-PLM 2023.

Further reading
ACER and UNICEF partner in assessment and evaluation

ACER has been entrusted to provide technical assistance in large-scale national and regional assessments in the Asia-Pacific region and program evaluations in Eastern and Southern Africa and South Asia for UNICEF countries.
Education drives poverty reduction, inclusion, economic growth, and sustainable development. Countries across the globe have made remarkable advancements in student enrolments in school. Provision of quality education to all children, however, remains a challenge and cross-country differences in educational achievements are apparent. Further, the COVID-19 pandemic has intensified global educational challenges and disparities due to school closures across many countries. To understand real progress, education stakeholders are focused on measuring student learning outcomes and evaluating education programs in different regions.

In 2020, ACER signed two significant Long-Term Agreements (LTA) with UNICEF. One involves design, implementation and reporting on large-scale national and regional learning assessments in the Asia-Pacific region and the other covers technical assistance in the evaluation of education programs and interventions in countries under UNICEF’s Eastern and Southern Africa Regional Office (ESARO) and Regional Office for South Asia (ROSA). Both agreements will run for three years with the possibility of a further two-year extension.

The LTA framework for the Asia-Pacific region covers UNICEF’s flagship initiative, the Southeast Asia Primary Learning Metrics (SEA-PLM), of which ACER is the lead technical partner. SEA-PLM is a regional program for Southeast Asian countries to assess student learning outcomes of Grade 5 students. The program’s central focus is to support member countries to develop robust learning assessment systems, enabling them to monitor student learning outcomes and to contribute to a more equitable and meaningful education for all children across the region. SEA-PLM is led through a partnership between the Southeast Asian Ministers of Education Organization (SEAMEO) and UNICEF.

Under the new assignment for program evaluation in Eastern and Southern Africa and South Asia, ACER has partnered with 14 expert organisations across nine countries in the ESARO region and nine expert organisations across six countries in the ROSA region. It demonstrates ACER’s ability to work with multiple partners and often new partners in different regions, reflecting the organisation’s truly global footprint.

ACER is now a recognised partner for UNICEF countries in all areas of large-scale assessment in the Asia-Pacific region and in different areas of evaluation in UNICEF ESARO and ROSA countries. We are committed to supporting education stakeholders in evidence generation and utilisation, including, but not limited to, student assessments, educational research and evaluations. We engage with educational organisations and professionals across regions to improve teaching and learning, particularly encouraging the use of robust data for educational decision making.

ACER has designed and led large-scale international, regional and national assessments and evaluations for countries around the world, including low- and middle-income countries. Through its expertise in evidence generation, ACER will continue to support education policymakers and program implementers in different countries to respond to the educational needs of a world shaken by the pandemic.

Further reading
Read more about ACER’s Long-Term Agreement with UNICEF in the Asia-Pacific region at: acer.org/gb/discover/article/unicef-and-acer-establish-new-long-term-partnership-framework
Read more about South East Asia Primary Learning Metrics (SEA-PLM) at: seaplm.org/
A needs-based early childhood care and development model

ACER Indonesia is driving improvements in early childhood care and development in Southwest Sumba.

ACER Indonesia is partnering with the William and Lily Foundation and Adaro Bangun Negeri Foundation on a two-year project which promises to improve the learning and development outcomes of Indonesian children in early childhood and development centres.

This project will focus on Early Childhood Education and Development (ECED) centres or Pendidikan Anak Usia Dini (PAUDs) in 12 villages. These villages have been selected because their teachers have not received mandatory training from the government and many children have delayed physical development, or stunting.
Our efforts in early childhood care and education aim to build a solid foundation for every child, that can be further strengthened across the lifespan. Gains made in the early years improve equity in the later years.

Following a baseline study, the project will develop, implement, monitor and refine a model for the professional capacity development of early childhood and health workers, and make recommendations for further initiatives or scale up.

The baseline study collected evidence to support the design of targeted interventions. Children, teachers, and health workers in 12 villages, including six ECED centres were surveyed. The results found that:

- children assessed in this study could correctly answer less than 50 per cent of the questions covering pre-literacy, writing and fine motor skills, pre-mathematics, and executive function
- children and their parents tended to prioritise cultural activities over academic learning.

This low achievement could be due to a lack of engaging learning material, limited teaching skills of PAUD personnel; and unhealthy teacher-student interaction such as the use of negative verbal language.

Further, the survey revealed the absence of professional development programs. It found that few teachers had participated in professional development activities, such as training and mentoring programs. Hardly any learning materials or professional literature was available for teachers, and a minimum amount of supervision and accountability measures were by the district’s supervisor. Teachers’ own domestic matters could have also affected their professional performance, according to the study.

Community healthcare workers (Posyandu) from Integrated Healthcare Centres had limited knowledge of maternal-child health and nutrition. This was attributed to inadequate training and a lack of support from senior staff who did not have the skills and means to appropriately train their junior colleagues. Other integrated ECED services such as parenting education and child protection services were notably missing and these services were further impacted by the COVID-19 pandemic.

Evidence from the baseline study suggests that any intervention targeting improvements in learning and development outcomes must take into account the cultural needs of the community. This may include developing a culturally responsive adaptation of the curriculum and outcomes framework, training educators to implement culturally appropriate pedagogies, and creating meaningful partnerships with families in the community.

Other recommendations include up-skilling ECED teachers so they achieve the competencies required for early childhood care and education, sufficient monitoring and accountability measures for ensuring high standards of teaching in classrooms, and better community engagement through, for example, parenting education and child safety training and services.

ACER Indonesia Director Lani Ganda says, ‘Our efforts in early childhood care and education aim to build a solid foundation for every child, that can be further strengthened across the lifespan. Gains made in the early years improve equity in the later years. In Indonesia and Southeast Asia where many communities are culturally diverse, our intervention will support development of culturally-responsive programs in the region.’
The Australian Government’s Department of Foreign Affairs and Trade (DFAT) has commissioned ACER to conduct the Teacher Development Multi-Year Series, a long-term, multi-country study to determine the extent to which Australian investments improve teaching quality and student learning.

The Office of Development Effectiveness 2015 evaluation report, Investing in Teachers, recommended that DFAT monitors and evaluates teacher development investment outcomes. Consequently, the purpose of the study series is to answer these questions:

- To what extent have Australian investments in the professional development of teachers contributed to improved outcomes?
- What are the conditions of success for teacher professional development investments, and how can lessons learned inform future programming?

DFAT Senior Education Advisor Dr David Coleman says, ‘We value ACER’s expertise and independence in leading this ground-breaking study. By deeply analysing teacher effectiveness and the impacts on student learning across three very different country contexts, the study is a major contribution to understanding education reforms in real time.’

Timor-Leste study

In Timor-Leste, the three-year study focuses on Apoio Lideransa lihusi Mentoria no Aprendizajen (ALMA, as part of the Australia-Timor-Leste Partnership for Human Development) – previously known as the Professional Learning Program. ALMA aims to improve teaching quality and school learning environments by supporting school leaders and teacher effectiveness. The main components include leadership training, teacher working groups, mentoring and the use of tablet-based applications to support school leaders and mentors.

The study seeks to understand the extent to which education stakeholders, including school leaders and teachers, develop teaching knowledge and

ACER is building evidence to support Australian investments in teacher development in the Asia-Pacific region.
change practices over time. It also explores whether participation in the ALMA program leads to improvements in learning outcomes for students. This study is framed within the context of Timor-Leste’s new National Basic Education Curriculum (Grades 1 to 6), which incorporates a child-centred approach to teaching and learning.

To analyse teaching quality and implementation of the new curriculum, interviews at national and municipal level, and school level case studies from six clusters in six municipalities are being conducted over three years. The evaluation of learning outcomes is based on the Early Grade Reading Assessment (EGRA) and Classroom Based Assessment data from 2017, school level case studies, national and municipal level interviews and supplemental classroom observation data. The final report will be released in 2022.

**Lao PDR study**

Lao PDR is a diverse country with 50 official ethnic groups and an estimated 84 spoken languages. The official language of instruction is Lao, which many remote communities do not speak. Children in these areas have very limited exposure to print prior to schooling.

ACER is conducting a four-year study to investigate the extent to which investment in teacher development improves teaching quality and student literacy in Lao language. The study focuses on one component of the Basic Education Quality and Access in Lao PDR (BEQUAL) program, in 32 of the most educationally disadvantaged districts in the country.

The study investigates the impacts of the Lao language in-service program on teaching quality and whether students’ literacy outcomes improve following implementation of the new curriculum. The study involves surveys of teachers and principals, Lao literacy tests of Grade 1 students, case studies of teachers, principals and pedagogical advisers, and Grade 1 classroom observations.

The study observes individual teachers and principals, and cohorts of students, with a focus on inclusive practices for linguistically diverse teacher and student populations, active learning and formative assessment of student learning.

**Vanuatu study**

ACER’s three-year study in Vanuatu evaluates the effectiveness of the Vanuatu Education Sector Program (VESP) in the staged introduction of a new primary education curriculum and the in-service teacher professional development support that accompanies it.

Vanuatu is a diverse country, with more than 100 languages and dialects spoken. Since 2015, the first two years of primary education can be delivered in Bislama or the local vernacular due to changes in the language policy.

Vanuatu’s new curriculum and training aims to promote teaching practices that support inclusive education, such as student-centred learning and community connections, language transition and classroom-based assessment practices.

The new reforms are being evaluated through case studies in approximately 30 schools over three years, national level focus groups and interviews, and the 2018 teacher questionnaires from the Pacific Island Literacy and Numeracy Assessment (PILNA). Learning outcomes are being measured through the Vanuatu Standardized Test, PILNA results, school level case studies and national focus groups and interviews. The final results will be published in 2022.

While the focus areas, data collection methods and results are unique to each study, the overarching conceptual framework for the study series provides valuable insights for researching teacher development investments in the region. Key themes emerging across the three studies include challenges related to language of instruction, approach to teacher development and embedding teacher development within a system of support.

‘Ultimately, we want to understand whether Australian investments in these countries have improved teaching quality and student learning. Quality evidence is critical to informing education policy and future investments in teacher development in the Asia-Pacific region,’ says Dr Elizabeth Cassity, Senior Research Fellow from ACER’s Education and Development research program.

The Teacher Development Multi-Year Series is an initiative of the Education Analytics Service, established by DFAT’s Education Section to improve the extent and quality of evidence and expertise used to inform its education policy and programs.

**Further reading**

Read more about the Vanuatu Education Sector Program at: dfat.gov.au/geo/vanuatu/development-assistance/pillar-2-stability#education


Read more about PILNA at: eqap.spc.int/PILNA
Reviewing professional development programs on inclusive teaching and learning

The Global Education Monitoring (GEM) Centre is conducting a review of in-service professional development programs that help teachers in low- and middle-income countries in the Asia-Pacific region build their competencies in inclusive education of children with disabilities.
One-third of children who are not in school in the Asia-Pacific region have a disability. The education systems in the region, especially in low- and middle-income countries, are witnessing a shift from educating children with disabilities in segregated settings to including them in mainstream schools. Teachers have a key role in this transformation: to ensure that every learner has access to quality education and opportunities to reach their full potential.

The scoping review aims to identify in-service professional learning programs assisting already practising teachers with the inclusion of students with disabilities in low- and middle-income countries in the Asia-Pacific region. The study has been jointly funded by ACER and the Australian Government’s Department of Foreign Affairs and Trade (DFAT) through the GEM Centre.

The investigation includes examining if the professional learning programs were designed for teachers in early childhood settings, mainstream or special schools, and whether they have reported teacher- or student-level outcomes. The review identifies, describes and categorises evidence on the professional development of teachers for inclusive education of children with disabilities from 41 economically developing countries listed by DFAT in the Asia-Pacific region. Around 692 records have been screened to date. The study includes interventions that:

- target teachers in early childhood or school settings (early childhood care and education services, Kindergarten-12 mainstream schools, and special education schools) working with children between the ages of 0 and 18 years
- support teachers in the provision of inclusive education of children with disabilities in mainstream schools
- belong to low- and middle-income countries in the Asia-Pacific region
- demonstrate improvements in teachers’ attitudes or practices and, in ideal situations, student learning.

Policymakers, school leaders and teachers can explore if any of the programs can be adapted to their own settings to support the inclusion of children with disabilities in mainstream schools.

The methodology of the review draws on the work proposed by Levac, Colquhoun and O’Brien in 2010, Joanna Briggs Institute, and Campbell Collaboration’s Evidence and Gap Maps.

The results of the study – expected to be published in 2021 – will present the number of interventions in a particular educational setting, the number of interventions in each country, the different forms of disabilities a professional development intervention supports, and the outcomes of the intervention. An online evidence and gap map will provide details about interventions categorised by educational setting, outcomes and forms of disabilities. The project also includes the development of a resource kit – including handbooks, online tools and manuals – from across regions that can assist professionals to provide better educational services to children with disabilities.

‘The illustrative and interactive evidence map will provide information on professional learning programs in the region with details such as mode of delivery and duration, and their effects on teachers and students,’ says Dr Petra Lietz, ACER Principal Research Fellow. ‘The study will help researchers identify gaps and opportunities for further research. Policymakers, school leaders and teachers can explore if any of the programs can be adapted to their own settings to support the inclusion of children with disabilities in mainstream schools.’

The evidence gathered through this study will support governments and development partners when making policy, program and investment decisions in low- and middle-income countries and help to identify the key areas for effective program implementation.

This study could not be more timely, as education stakeholders are working towards meeting the education targets laid out in the United Nations Sustainable Development Goals, including target 4.5, which focuses on access to all levels of education for children with disabilities. As the pandemic threatens to reverse the advancements made in improving educational equity, this review will help development partners and policymakers to set their sights on specific areas of professional development intervention for inclusive education of children with disabilities in the post-COVID-19 world.

Further reading
Read about ACER’s review of the effectiveness of early childhood care and intervention program at: acer.org/in/discover/article/using-evidence-to-make-a-difference-to-young-childrens-learning

Read about ACER’s thematic review on children with disabilities in the Asia-Pacific region at: acer.org/au/discover/article/assessing-learning-of-students-with-disabilities

This is an edited version of an article first published in ACER Discover at: acer.org/au/discover/article/reviewing-professional-development-programs-on-inclusive-teaching-and-learning

References

Nepal has undergone a long and complex transition towards establishing federalism in recent years. The new structure of governance offers opportunities and challenges for the education sector.

The amendment of the Education Act in 2016 introduced two key changes to school education: examinations at the completion of basic education in Grade 8 that allows entry to secondary education; and the formation of the National Examination Board (NEB) to oversee standardisation of the Grade 8 and secondary school examinations.

Nepal shifts to the testing of higher order skills

An overhaul of the examination system in Nepal focuses on standardisation of exams and assessing higher order thinking skills at the end of basic education.
Under the new decentralised structure, 753 local governments in Nepal have conducted the Grade 8 examinations since March 2018. There were some impediments to smooth implementation of the exam, including a lack of coordination between NEB, Curriculum Development Centre (CDC), and local governments, weak monitoring mechanisms, and absence of comprehensive documentation of examinations at the federal level.

The Asian Development Bank, under the School Sector Development Plan, partnered with ACER in India to provide technical assistance to improve the Grade 8 school examinations to ensure that it effectively measures student learning outcomes.

The project is divided into three phases:

• a scoping review and situational analysis that offer recommendations for the next stages of the project
• development of an assessment framework that provides clear guidelines for valid, reliable, and consistent assessments in English, mathematics, and science
• capacity building of key stakeholders in examinations and assessment.

The scoping review and situational analysis involved a visit to Nepal and consultations with key stakeholders to understand the educational challenges and learning assessment needs. The analysis found that:

• key agencies and related bodies had diverse views on subjects that should be included in the Grade 8 examinations
• technical capacity varied across key government educational agencies, so the standardisation of examinations had to be achieved by tapping resources of more than one department
• there was a lack of understanding of modern item analysis and its techniques
• local governments were not fully equipped to implement the examination process, including item writing, test building, administration, monitoring, and student and school results reporting
• the specific areas for capacity development were item writing, test development, psychometric item analysis and field trialling.

The development of the assessment framework was a lengthy and detailed activity – from defining test domains to developing the principles for rubrics for each domain. The central theme of the framework was the introduction of higher order thinking skills items in the Grade 8 examinations to divert teaching and learning in Nepal away from rote learning. The other was achieving the standardisation of exam results based on the modern item analysis theory.

Due to the ongoing COVID-19 pandemic, the first of the series of capacity building workshops on developing test items was conducted virtually. Selected staff from the Education Review Office, CDC, NEB, and secondary school assessment specialists, teachers, principals, headmasters, and heads of departments participated in the workshop. The consequent workshops, conducted online, focused on quality assurance of test items and creation of an item bank.

The key results of the project include a robust assessment framework and draft high-quality assessment items that can be included in the final assessment. The items were reviewed for quality assurance and a pool of questions created. An important outcome of the workshops will be a team of local Nepalese experts, trained by ACER, who will become the backbone of the assessment system.

'It has been a wonderful experience working with Nepali education experts who are open to new and innovative ideas and immensely motivated by the love for their country. We look forward to future engagements in supporting educational assessments and quality education in Nepal,’ says Dr Mee Young Han, ACER India Research Director.

Throughout the project, ACER has been working closely with local experts as well as education officers in the government, which will enable them to develop their own capacity and ultimately achieve the goal of examination standardisation by themselves.

Further reading

Read more on ACER Discover at: acer.org/in/discover/article/supporting-examination-reform-in-nepal

The data for the illustration was taken from uis.unesco.org/en/country/np
Measuring the impact of a girls education program in Zambia

ACER is expanding its work in Africa through the evaluation of the Zambian Girls 2030 program.
The Zambian Girls 2030: Realizing My Potential program was initiated in 2016 through a partnership between the Ministry of General Education (MoGE) and UNICEF. The program aims to ensure better educational and employment outcomes for Zambian girls through various educational interventions at the secondary school level. The ACER evaluation will shed light on the results achieved against the targeted objectives and the potential for expansion of the program.

Girls’ education continues to face challenges in Zambia. Secondary schooling is not free and many families cannot afford to educate all of their children. Socio-cultural factors, such as early sexual debut and intergenerational sex, teenage pregnancies, sexual abuse, early marriages, the cost associated with girls’ school attendance, girl-unfriendly school structures, gendered roles and responsibilities, and child labour lead to low participation of girls in secondary school.

The interventions of the program are particularly targeted towards improving the transition rates of girls from primary to secondary education, secondary school completion rates, participation of girls in tertiary education, and their employability and entrepreneurial skills. The ACER evaluation examined in detail three components of the program to report the implementation challenges, expansion opportunities, and sustainability.

- School level career and skills clubs: girls in grades 5 to 12 attend career club meetings every week where teachers provide advice on a range of subjects, such as financial literacy and entrepreneurship skills, leadership and communication skills, life skills, as well as sexual and reproductive health.
- District level career and skills camps: girls in grades 8 and 9 participate in district-level career and skills camps during school holidays. Female leaders and sector experts present workplace realities.
- Career internship program: girls in grades 10 to 12 are provided with opportunities to work as corporate interns during the school holidays. This involves a full-time placement for two weeks each year.

The ACER team assessed if the Zambian Girls 2030 program has been able to:
- achieve the intended results at output and outcome levels
- use the program resources (financial, human, and technical) effectively to achieve results
- respond to the needs and priorities of the beneficiaries, as well as the strategic priorities of the MoGE
- establish key conditions and factors for the program to continue effectively without external support.

ACER used an exploratory and mixed methods approach – quantitative and qualitative – to gather the evaluation data. Some of the broad questions for investigation include: To what extent has the program addressed gender barriers enabling girls to stay in school? Have girls gained an interest in Science, Technology, Engineering and Mathematics (STEM) subjects? Have they achieved an active role in the labour market?

The evaluators interviewed 30 girls, 12 boys, one school leader, and one guidance and counselling teacher in each sample school. They also conducted focus group discussions with parents and caregivers living close to the school. Representatives from MoGE, UNICEF, Restless Development, and other key stakeholders were interviewed to gain insights into the program components. The evaluation questions were mapped against the OECD-DAC criteria of effectiveness, efficiency, relevance, sustainability and equity. Thirty schools spread across Mungwi, Luwingu, Mbalia, and Mpulungu districts in the Northern Province and Pemba, Sinazongwe, Namwala, and Monze in the Southern Province were covered in the evaluation study.

‘This evaluation strengthens our understanding of the program’s impact and can help policymakers and development partners in evidence informed decision making. The findings of the evaluation will be available in 2021.

The interventions of the program are particularly targeted towards improving the transition rates of girls from primary to secondary education, secondary school completion rates, participation of girls in tertiary education, and their employability and entrepreneurial skills.

Further reading
ACER is also evaluating a remedial learning program in Zambia. Find out more on ACER Discover: acer.org/discover/article/evaluating-a-remedial-learning-program-in-zambia
Learning Through Play at School is a pioneering research study that investigates how playful approaches to teaching and learning are applied in the classroom. The four-year study provides an opportunity to expand understanding of learning through play at school in Ukraine and the impact on teachers and students.

The study investigates whether playful approaches to teaching and learning make a difference to the literacy, social and emotional skills of children. It also examines the factors that enable or challenge teachers when applying learning through play.
Learning Through Play at School is a partnership between ACER and the LEGO Foundation. The research study is implemented in-country by the Ukraine Educational Research Association (UERA).

As lead technical partner, ACER is responsible for the research design, instrument and intervention development, data analysis and reporting. UERA is responsible for in-country operations and management of the study, including school coordination and data collection.

Play is critical to the holistic development of the child as it helps to foster a breadth of skills including creative, cognitive, physical, social and emotional skills. Learning through play is play that involves children’s interactions with people, objects or representations as the context for learning. It also helps in language development and self-regulation.

The research study has two unique features:

- a blended online and face-to-face professional learning program for teachers, and
- a playful and engaging student assessment.

Both elements are based on established evidence and an understanding of what works in education research.

Teachers from 10 schools in Ukraine are participating in the two-year professional learning and mentoring program covering the principles, practices and assessment of learning through play at school. The Teacher Innovative Play Program (TIPP) is an interactive learning program, facilitated by an expert pedagogy partner. Teachers will participate in four mentoring sessions each year, providing an opportunity to review footage of their teaching practice and reflect on their progress.

Students of teachers involved in the TIPP will participate in an assessment of the literacy and socio-emotional skills associated with learning through play. Another 10 schools will participate in the assessment and receive access to training materials at the end of the study. This enables comparison of the impact of learning through play on the students of teachers who have participated in the study and those who have not.

The Learning Through Play at School Literacy and Socio-Emotional Skills assessment is unlike others. Many standardised literacy assessments for young children involve one-to-one administration of a series of disconnected items on vocabulary, letter recognition, and listening comprehension. These assessments can be tiring and stressful for young children. In these contrived settings, some children are not inspired to demonstrate their highest level of ability.

Administered one-to-one, the Literacy and Socio-Emotional Skills assessment is scored on the spot by trained administrators.

The assessment kit includes beautiful artwork and cut out characters for children to play with and hold. Feedback from the pilot revealed that children enjoyed the assessment and wanted it to continue.

Learning Through Play at School arose from a global scoping study conducted by ACER and the LEGO Foundation in 2018. The study found that learning through play is relevant and applicable to primary school when defined as holistic learning through experiences that are meaningful, iterative, joyful, socially interactive and actively engaging. Importantly, the study found that learning through play can be effective in fostering cognitive, social, emotional, physical and creative skills under certain conditions.

Ukraine was chosen for the study because of recent reforms to its education system. The New Ukrainian School (NUS) reform aims to better equip Ukrainian young people with the skills and knowledge they require for the future of work. These skills include lifelong learning, critical thinking, civic engagement, intercultural communication, and collaborating in teams.

Twenty schools from five provinces in Ukraine are participating in the Learning Through Play at School research study. It also provides professional learning and mentoring opportunities for teachers in Ukraine.

The study is important in the context of global education reforms that emphasise the importance of skills for 21st century learning and has the potential to be adapted and implemented in other countries in the future.

Further reading
Read the learning through play at school global scoping study at: legofoundation.com/media/1740/learning-through-play-school.pdf
ACER’s key development partners include:

- Aga Khan Foundation (AKF)
- Asian Development Bank (ADB)
- Australian Government’s Department of Foreign Affairs and Trade (DFAT)
- British Council
- Foreign, Commonwealth & Development Office (FCDO)
- Global Partnership for Education (GPE)
- Network for Education Quality Monitoring in the Asia-Pacific (NEQMAP)
- Organisation for Economic Co-operation and Development (OECD)
- Pacific Educational Quality Assessment Programme (EQAP)
- People’s Action for Learning Network (PAL)
- Porticus
- Pacific Community (SPC)
- Southeast Asian Ministers of Education Organization (SEAMEO)
- The LEGO Foundation
- United Nations Children’s Fund (UNICEF)
- United Nations Educational, Scientific and Cultural Organization (UNESCO)
- VVOB
- World Bank

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