ADB Support for School Education (K–12) in Asia and the Pacific

KEY POINTS

• The Asia and Pacific region, home to almost 4.5 billion people, has significantly increased access to education and achieved the related targets under the Millennium Development Goals. But the quality of education, particularly the attainment of learning outcomes, remains a challenge.

• The Asian Development Bank (ADB) has been working with its developing member countries for more than 50 years to expand and improve education at all levels.

• ADB has allocated about $15 billion in loans and grants for the education sector.

• ADB’s school education support focuses on three main areas: quality and relevance, systems and governance, and equitable access.

INTRODUCTION

The Asia and Pacific region is home to almost 4.5 billion people—up to 60% of the world’s population—taking up about 30% of the world’s land area. The region has had notable success since 2000 in meeting the Millennium Development Goals, particularly in reducing poverty, according to the United Nations. However, despite rapid economic growth, social development, and technological progress, the region still faces major challenges: improving governance, upgrading citizens’ quality of life, and lessening inequality at the regional, subregional, and country levels.1 This brief examines these challenges for education in Asia and the Pacific and response by the Asian Development Bank (ADB).

In developing countries, students in classrooms do not read, write, and compute as much as their counterparts in more developed countries. Globally, more than 260 million children are out of school and more than 600 million children in school are not learning the basic skills, knowledge, and values they need.2 Too many students attend school but learn very little. According to the World Bank, hundreds of millions of children around the world reach young adulthood without basic life skills.3 While the “learning crisis” may be at its worst in sub-Saharan Africa, Asia and the Pacific has the highest number of children and young people affected by low learning outcomes. For example, most people with no formal education live in South Asia.4

The Bill & Melinda Gates Foundation suggests that ensuring high-quality education in all schools should be given priority. However, while there are proven approaches to

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teaching literacy and numeracy in a single classroom, consensus on what it will take to improve the basic skills of every single child in every single school in every single country has yet to be reached.5

Geographically and culturally diverse though they may be, countries in Asia and the Pacific face common challenges in education development. Access to education may have improved, funding for the sector increased, and gender disparity narrowed, but there is still a dearth of qualified teachers, good learning materials and facilities, and relevant curricula.6

Addressing these challenges will be central to achieving the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) in Asia and the Pacific, especially SDG4 (ensuring inclusive and equitable quality education and promote lifelong learning opportunities for all), and attaining prosperity and sustainable development for the region.

Moreover, the start of 2020 was marked by the onset of the coronavirus disease (COVID-19). Many countries were ill-prepared to make the necessary shift from face-to-face learning to online distance learning. In April 2020, almost 1.5 billion students in over 150 countries worldwide were affected.7 COVID-19 has also shown that a lack of continuity in formative assessment prevents teachers from monitoring progress and directing their support at struggling learners. Improving learning outcomes in ADB’s developing member countries (DMCs) has become an even bigger challenge. ADB has responded to these challenges with special loans and technical assistance grants.

**ADB SUPPORT FOR EDUCATION**

From the ADB standpoint, Asia and the Pacific is, in a way, a global success story when it comes to educating children and young people. Overall, 9 out of 10 children in the region today are enrolled in primary school though two-thirds of the world’s out-of-school children in the 1970s were in this part of the world.8 However, the learning outcomes are not satisfactory and inequalities persist. In some countries, boys have more access to education than girls. Across the region, children with disabilities are disproportionately excluded from education, and internally displaced and refugee children often miss out on educational opportunities.

There is a growing consensus among ADB, its DMCs, and other development stakeholders that countries must reach and maintain a critical level of basic skills for societies to have the social and economic means to grow and prosper.9 If ADB can help strengthen the education systems of its DMCs, then the countries, and the region as a whole, will stand a better chance of competing in the global economy.10

ADB recognizes that universal basic education of much better quality results from the expansion of post-primary education, teacher education, and skills training, all of which rest on a strong primary-school foundation. ADB also helps each DMC develop a good mix of financing across the various school subsectors (footnote 10).

With about $15 billion in education loans and grants over more than 50 years, ADB has a long track record of assisting to achieve the goal of providing high-quality education for all. In 2019, ADB loans for education totaled around $1.1 billion.

ADB has funded education projects amounting to $7.4 billion in preprimary, primary, and secondary education; and $1.6 billion in general education sector development since 1970 (see figure).

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8 ADB. *Education Issues in Asia and the Pacific*.
10 ADB. *ADB’s Work in the Education Sector*.
Around $2.2 billion (39%) of the $5.5 billion in ADB funding for 61 ongoing education projects is for school education in 12 DMCs, as of October 2020.

**AREAS OF ADB SUPPORT FOR SCHOOL EDUCATION**

Poor learning outcomes, according to the World Bank, can be traced to four factors: unprepared learners, unskilled and unmotivated teachers, ineffective school management, and school input with little or no impact on the quality of teaching and learning. Focusing on differences between curriculum (what is taught) and classroom practices (how it is taught) can have profound effects on learning because national curricula determine the academic scope and sequence of instruction, as well as the breadth and depth of learning (footnote 4). For this reason, for example, Singapore emphasizes curriculum uncluttering through less teaching and more learning.

ADB-funded education projects cover a wide range of concerns in different areas consistent with the needs of its DMCs. In general, ADB support for school education addresses three priorities: quality and relevance of education, systems and governance, and equitable access to education.

**Quality and Relevance of Education**

**Teacher Education (Preservice and In-Service).** Evidence suggests that the learning crisis is, at its core, a teaching crisis. Good teachers are essential for good teaching and student learning, but in many countries, teachers are in short supply, isolated, and not given enough support to provide effective teaching and learning (footnote 2). Many education systems pay little attention to what teachers know, what they do in the classroom, and, in some cases, whether they even show up (footnote 4). Barber and Mourshed (2007) underscore the importance of attracting the right teacher applicants, including the top cohort of secondary graduates, or limiting enrollment in teacher training to those with a genuine motivation to teach.11

Many ADB-funded education programs incorporate teacher education as a key component to increase the number of well-trained and motivated teachers in the developing world. Teachers must have subject-specific knowledge and relevant pedagogical skills, which must be continually updated. New models of teacher education can enhance these teaching competencies and encourage shifts in instructional practices to meet the needs of present-day learners.

The Sindh Secondary Education Improvement Project in Pakistan supports the introduction of a teacher training and mentoring program in selected secondary schools to help bolster the teaching capacity of Pakistani teachers in five key subjects—English, mathematics, biology, chemistry, and physics.12 Following an assessment of teacher availability and training needs, teacher training modules will be developed and about 2,600 teachers will receive classroom training and in-class mentoring from subject-specialist master trainers using information and communication technology (ICT). Laboratory equipment will also be provided to some secondary schools.

The Kyrgyz Republic improves the quality of teachers and teacher in-service training in its Strengthening Education System Sector Development Program by holding ICT-assisted in-service teacher training to upgrade the methodological competencies of 10,000 teachers, among other program activities.13 School principals and deputy principals, teacher training institute staff, and district methodology specialists will also receive capacity development training.

In the Philippines, the Secondary Education Support Program supports measures to increase the number of qualified teachers in secondary schools, equipping them with necessary skills and providing professional development and career development opportunities.14

**Curriculum Development.** A relevant curriculum is needed for high-quality education. Critical in curriculum design is the breadth of knowledge provided on a subject versus the depth of learning on specific topics. Policymakers, under pressure from would-be curriculum “influencers,” often try to include all design suggestions; the usual result is an overloaded curriculum. Another challenge is the gap between the curriculum teachers deliver to complete their task for the year and what students actually learn.

Many teachers continue with a curriculum without ensuring that all students learn. Fragmented curricula may also frustrate teachers and students and can easily lead to disjointed and superficial teaching.15 In many Asian countries, the curriculum is often overloaded and heavily focused on academic knowledge. The absence of practical applications of learning and the rush to deliver a loaded curriculum often result in rote learning and learning for test preparation. Curriculum load needs to be reduced and the learning of concepts plus their application emphasized. Teachers should also teach at specific grade levels to ensure that all students learn in accordance with the learning objectives set for each grade.

There have been many curriculum reforms promoting competencies such as critical and analytical thinking, innovation, creativity, and communication (footnote 6). How these

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12 ADB. Pakistan: Sindh Secondary Education Improvement Project.
13 ADB. Kyrgyz Republic: Strengthening Education System Sector Development Program.
14 ADB. Philippines: Secondary Education Support Program.
21st century skills should be included in the curriculum is one more challenge to be dealt with, especially since these “soft skills” commonly refer to a broad set of knowledge, skills, work habits, and character traits critical to the development of self-directed learners. Although many countries advocate the inclusion of these skills in the curriculum, assessments, and instruction, helping teachers to understand, teach, and assess these skills in the classroom will take time (footnote 15).

In the Lao People’s Democratic Republic (Lao PDR), ADB provided start-to-finish support for government efforts to reform the lower and upper secondary curriculum, under the Basic Education Sector Development Program and the Secondary Education Sector Development Program. This included the addition of grade 12 (helping Lao PDR reach the international norm), updating curriculum content to give prominence to 21st century skills, and support for teachers in delivering new content and pedagogy.

With ADB support, similar reforms with a 21st century focus are being made in the secondary education curriculum, pedagogy, and student assessment in Myanmar, under the ongoing Equipping Youth for Employment Project and prospective collaboration with the European Union. These reforms will be particularly critical, because the secondary education sector accounts for the largest share (half) of entrants into nonagricultural wage employment in the country. This approach is also consistent with providing high-quality universal secondary education, a DMC priority.

One objective of the Kyrgyz Republic’s Strengthening Education System Sector Development Program (footnote 13) is to enhance the quality of their curricula. For this purpose, the Ministry of Education will develop the capacity of curriculum writers and create a curriculum review unit.

Learning Outcomes. These refer to the personal changes or benefits derived from learning and are now the top priority in many ADB education projects. Changes or benefits can be measured in terms of abilities or achievements a learner has gained—what the learner knows or can do as a result of learning. The learner knows or can do as a result of learning. Major international assessment programs such as the Program for International Student Assessment (PISA) and the Trends in International Mathematics and Science Study (TIMSS) test learning competencies in science, mathematics, and language at various stages. Any changes, apart from a transformation within the pedagogy itself, will have a limited effect on actual student learning. Learning should become more learner-centered.

In Bangladesh, an efficient and effective system providing high-quality primary education is envisioned under the Fourth Primary Education Development Program. It builds on the achievements of previous programs with a strong focus on enhancing the quality of education, making it more accessible, and reinforcing institutional management through decentralization, incorporating systematic and targeted interventions to improve learning outcomes.

The Improving the Quality of Basic Education in the North Pacific project of the Federated States of Micronesia aims to boost learning outcomes in primary education by developing teacher in-service training and student assessment plus improving accessibility and the use of teaching and learning resources. Parallel support for the Pacific Regional Education Framework from several development partners, including ADB, emphasizes providing robust tools, mechanisms, and support structures to improve learning outcomes and well-being in the country.

The Supporting School Sector Development Plan project of Nepal supplies the country with activity-based learning materials, strengthens the capacity of subject teachers through continuous professional development, and redesigns and standardizes public examinations at the end of grades 8 and 10. An autonomous National Examinations Board has already been established under the program.

In Viet Nam, upper secondary education is being enhanced under the Second Secondary Education Sector Development Program, to improve learning outcomes and ensure that graduates have the relevant skills to meet the needs of the labor market.

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17 ADB. Lao People’s Democratic Republic: Basic Education Sector Development Program; Lao People’s Democratic Republic: Secondary Education Sector Development Program (formerly Basic Education Sector Development Program II).
18 ADB. Myanmar: Equipping Youth for Employment Project.
21 ADB. Bangladesh: Supporting Fourth Primary Education Development Program.
22 ADB. Regional: Improving the Quality of Basic Education in the North Pacific.
25 ADB. Viet Nam: Second Secondary Education Sector Development Program.
One major lesson drawn from the COVID-19 experience is the urgent need to develop continuous formative assessment tools online, enabling teachers to monitor student learning and provide targeted instruction to struggling students. Increasingly, the development of data on student learning outcomes linked to learning objectives and teaching practices is becoming an integral part of new-generation education technologies based on adaptive or personalized learning.

**Systems and Governance**

Teachers have a critical role in providing high-quality instruction and meeting SDG4 goals and targets. But they do not work in isolation; it takes a whole team to educate a child. While teachers can be effective in assisting learners with the greatest needs (footnote 2), school leadership is another decisive factor in developing high-performing school systems. School education, devolved to local governments in most DMCs, can be transformed and made more effective by school leadership, collaborating with local communities, local governments, education authorities, parents, and other stakeholders to achieve shared goals.

Education systems researchers caution against ignoring politics and assuming education systems can be fixed with the right technical support. Taking a political economy approach to school improvement, with reform targets that can be monitored to ensure accountability and buy-in from all key stakeholders, will have more impact.

Among other measures being taken to strengthen secondary education sector management in the Philippines under the Secondary Education Support Program, institutional arrangements are being put in place for the implementation of the public financial management reform program of the Department of Education. 26 Also, a policy creating school governance councils in secondary schools will be issued in the project.

The regional project, Strengthening Human Resources and Leadership for Education (Bangladesh, Cambodia, and the Philippines), part of the Teach for All global initiative to get qualified university graduates into teaching, enables knowledge exchange on promising and effective approaches through partnerships between government and civil society organizations to improve teacher quality and effectiveness in Bangladesh and Cambodia. It helps upgrade teacher quality and leadership capacities in the Philippines through teacher development. 27

In Mongolia, the Sustaining Access to and Quality of Education during Economic Difficulties project is building up systems for education planning and managing education services using a geographic information system based on a process of collecting and analyzing education information. 28 The country’s education administration should likewise improve, along with the general development of the country’s educational management information system (EMIS).

Promoting evidence-based policy analysis and accountability to enhance the learning outcomes of students is also important. 29 This will require improving EMIS data on learning outcomes, analyzing these regularly to improve data quality, and reporting the data at all levels of education at regular intervals to increase accountability.

ADB-funded education projects provide a major opportunity to develop a school leadership program through twinning selected universities and centers of excellence, where feasible, to bring global best practices in school leadership.

**Equitable Access to Education**

Some education projects supported by ADB are mainly concerned with developing critical education infrastructure, especially after natural disasters, because access to education is a prerequisite for learning.

Among these are the Cyclone Ian Recovery Project in Tonga ($2.24 million), the Cyclone Pam School Reconstruction Project in Vanuatu ($5 million), and the Disaster Resilience of Schools Project in Nepal ($15 million). 30 The main goal of these projects is enabling the DMCs to bounce back better after natural catastrophes. Though there are usually no qualitative goals, objectives, or outcomes, since the short-term focus is regaining full effectiveness in providing education, such support looks into creating a more conducive environment to teaching and learning.

In Mongolia, the government set about the task of upgrading the school dormitory environment for primary school students under the Improving School Dormitory Environment for Primary Students in Western Region Project. 31 Buildings were refurbished and dormitory staff in three provinces with high poverty levels were trained to improve the overall environment and encourage families in remote areas to send their children to school. An impact evaluation study, to assess how dormitories have helped to make education more accessible, has also been launched.

Some projects support disaster preparedness efforts. In Armenia, the $17.7 million Seismic Safety Improvement Program will build earthquake-resilient schools to make the country better able to respond to natural disasters, given its vulnerability to them. 32

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26 ADB. Philippines: Secondary Education Support Program.
27 ADB. Regional: Strengthening Human Resources and Leadership for Education.
28 ADB. Mongolia: Sustaining Access to and Quality of Education during Economic Difficulties.
30 ADB. Tonga: Cyclone Ian Recovery Project; Vanuatu: Cyclone Pam School Reconstruction Project; Nepal: Disaster Resilience of Schools Project.
31 ADB. Mongolia: Improving School Dormitory Environment for Primary Students in Western Region Project.
32 ADB. Armenia: Seismic Safety Improvement Program.
The program also includes work strands related to curriculum development and access for disadvantaged groups.

Under the Sindh Secondary Education Improvement Project in Pakistan, secondary school blocks will be constructed in needy districts with limited space, to be operated by private partners under the School Education and Literacy Department’s education management organizations program, developed in 2015 (footnote 12).

In Uzbekistan, ADB helped increase the relevance and quality of basic education, especially in rural areas, and access to high-quality basic education, under the Rural Basic Education Project.33

Emerging Priorities and Lessons Learned

ADB has the opportunity to focus on the following areas to improve learning for all:

- **Reducing curriculum load, giving greater focus on 21st century skills, and improving assessment.** With an overloaded and overly academic curriculum, a country’s education system and learning outcomes cannot progress. Emphasis must also be placed on improving 21st century skills within the curriculum, along with a shift from summative to more formative and continuous assessment. The entire learning process, and not just final examinations, should be assessed. Disruptions caused by COVID-19 have demonstrated an urgent need to embed continuous formative assessment in curriculum delivery with the use of education technology. This is getting teachers to focus instruction on lagging students, and students moving toward personalized learning.

- **Improving the quality of teachers.** Recruiting, deploying, and retaining good teachers is still a challenge. More attention must, therefore, be given to getting the best secondary school graduates into preservice teacher education managed by universities and retaining them as teachers. Also, these programs must be developed to match the rigor of university education and include the development of basic research skills. This approach is crucial in improving the quality of teaching and enabling students to learn better. This will also help teachers find new ways of teaching better. Special attention must be given to teacher in-service programs as well.

- **Improving the quality of school principals and education management.** The quality of principals and education management professionals is key in improving an education system. When a principal is motivated to develop the school and staff, it is easier for teachers to achieve good results and for students to have better learning outcomes. When general education management has the capacity to support these efforts, even more satisfactory results can follow.

- **Promoting the use of education technology to raise the quality of education and make it more equitable and efficient.** Education technology has become very important, especially during the COVID-19 pandemic, and it is proving to be transformational in preparing teachers for more effective curriculum delivery and providing necessary support. With education technology, teachers can continuously monitor the learning levels of students and direct attention to lagging students, in helping them to learn at their own pace until they master the required competencies. It also makes it possible for parents to help their children learn better at home. In the future, the education sector will have to take a more holistic approach in using education technology to link government policy, access to appropriate infrastructure (connectivity, devices, digital materials), teachers and schools, home learning (support for parents and students), and public–private partnerships in technology-supported learning.

  - **Mobilizing more resources through innovative financing and better targeting and spending.** Normal education sector lending is no longer enough. The strategy that has worked to widen access alone will not improve learning outcomes because this requires raising the quality of teachers, school principals, and other members of the education workforce, and changing the mindset of key stakeholders. More innovative ways must be found or developed to improve learning outcomes, for example, through results-based lending, public–private partnerships, and the involvement of high-quality universities and centers of excellence with proven technical expertise.

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**Box 1: Early Childhood Education**

The Asian Development Bank (ADB) is planning two results-based lending programs in the area of early childhood education (ECE) in the People’s Republic of China (PRC). Under preparation are the *Jiangxi Shangrao Early Childhood Education Demonstration Program* and the *Shaanxi Xi’an Preschool Education Development Program.*

The first program is aimed at improving access to high-quality 3-year ECE, especially in rural areas, by improving the quality of facilities, improving preservice and in-service training for kindergarten teachers and principals, and developing models and systems for improving and ensuring the quality of ECE. This will be the first ECE program in the PRC. The Shaanxi Xi’an program, on the other hand, is an ADB loan program based on the comprehensive Xi’an Preschool Education Development Plan, 2019–2025. Among that plan’s intended results is the accelerated development of high-quality and equitable ECE.

The number of climate-friendly public kindergartens will be increased; teaching capacity will be developed; financing, regulation, and supervision mechanisms will be strengthened; and innovations made to improve ECE quality will be promoted and disseminated. The program is intended as a demonstration program for potential replication in the PRC and other countries.

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33 ADB, Uzbekistan: Rural Basic Education Project.
Box 2: Information and Communication Technology in Education

Information and communication technology (ICT) in education and mobile learning has huge potential, but evidence shows that schools and different education systems are seldom ready to harness its full potential. This potential is acknowledged in the United Nations Sustainable Development (Agenda 2030) Goal 4, and in United Nations Educational, Scientific and Cultural Organization’s Education 2030 Framework for Action and the 2017 Qingdao Statement.

According to the framework, “ICT must be harnessed to strengthen education systems, disseminate knowledge, provide access to information, promote quality and effective learning and deliver services more efficiently.”

In the People’s Republic of China, the Asian Development Bank (ADB) supports a project to develop students’ core competencies and reduce rural–urban disparities in primary education through ICT. Existing teaching, learning, and support systems and resources and the use of ICT in primary education will be assessed; national and international good practices and lessons learned in building students’ core competencies and addressing rural–urban disparities in primary education through the use of ICT will be introduced; and new or improved ICT-enabled teaching, learning, and support systems and resources in primary education will be pilot-tested.

In the Kyrgyz Republic, the ADB-funded Strengthening the Education System Sector Development Program is helping to develop a computerized textbook management system to effectively monitor textbook provision. It supports the use of ICT in in-service teacher training and classroom teaching by pilot-testing online modules and other forms of e-learning to increase the capacity of teachers and principals.

An ongoing ADB project in Mongolia focused on improving the quality of education and access to it is strengthening the capacity of the Institute of Teachers Professional Development to develop and deliver continuing professional programs for preprimary, primary, and secondary teachers through existing online platforms and workshops. It will establish model science, math, and information technology laboratories at the institute to train secondary teachers to use laboratory equipment and to facilitate experiments performed by students as specified in the curriculum.

ADB is supporting many DMCs to develop distance learning and teaching to respond to the needs for distance education due to the COVID-19 interruptions on education, like the Distance Education for Resilience Project in Armenia and the EdTech Solutions for Last Mile Schools on COVID-19 in the Philippines.

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b ADB. People’s Republic of China: Developing Students’ Core Competencies and Reducing Rural-Urban Disparities in Primary Education through the Use of Information and Communication Technology.
c ADB. Kyrgyz Republic: Strengthening the Education System Sector Development Program.
d ADB. Mongolia: Sustaining Access to and Quality of Education during Economic Difficulties.
e ADB. Armenia: Distance Education for Resilience Project.