



China, People's Republic of: Developing Students' Core Competencies and Reducing Rural-Urban Disparities in Primary Education through the Use of Information and Communication Technology

Project Name	Developing Students' Core Competencies and Reducing Rural-Urban Disparities in Primary Education through the Use of Information and Communication Technology	
Project Number	52237-001	
Country	China, People's Republic of	
Project Status	Proposed	
Project Type / Modality of Assistance	Technical Assistance	
Source of Funding / Amount	TA: Developing Students' Core Competencies and Reducing Rural-Urban Disparities in Primary Education through the Use of Information and Communication Technology	
	Technical Assistance Special Fund	US\$ 400,000.00
Strategic Agendas	Inclusive economic growth	
Drivers of Change	Governance and capacity development Knowledge solutions	
Sector / Subsector	Education - Pre-primary and primary Information and communication technology - ICT industries and ICT-enabled services	
Gender Equity and Mainstreaming	No gender elements	
Description	<p>The proposed knowledge and support technical assistance (TA) will increase enhanced teaching, learning, and support systems and instructional resources using information and communication technology (ICT) to develop students' core competencies and reduce rural-urban disparities in primary education in Gansu Province through policy advice, capacity development, and research. The Government of the People's Republic of China (PRC) has requested the TA from the Asian Development Bank (ADB) to achieve high-quality and balanced primary education. The TA is included in ADB's country operations business plan for the PRC, 2018-2020.</p> <p>The TA will have three outputs to address outdated teaching, learning, and support systems and resources for the development of core competencies, especially in rural areas:</p> <p>(i) existing teaching, learning, and support systems and resources and use of ICT in primary education assessed; (ii) national and international good practices and lessons in building students' core competencies and addressing rural-urban disparities in primary education through the use of ICT introduced; and (iii) new or improved ICT-enabled teaching, learning, and support systems and resources in primary education piloted. These outputs will result in the following outcome: enhanced ICT-enabled teaching, learning, and support systems and resources in primary education increased. The TA will be aligned with the following impact: high-quality and balanced primary education delivered.</p>	

Project Rationale and Linkage to Country/Regional Strategy

Facing a rapidly changing environment induced by a knowledge-based, innovation-driven, creative economy, the PRC's Ministry of Education (MOE) initiated in 2014 a new round of curriculum reform that emphasized each student's comprehensive individual development, sense of social responsibility, practical and innovation abilities, rather than merely acquiring subject knowledge and pursuing examination scores. As part of the reform, core competencies for each level of education have been identified, and incorporated into the curriculum. Priority has been given to developing supporting instructional resources through the use of ICT; transforming teaching-learning methods into student-centered and problem- and project-based; further integrating subjects and providing enriched learning opportunities for students through the involvement of a wider society; adopting diverse assessment measures to track student progress and devise individualized instructional strategies; promoting teachers' professional development; and strengthening school-based research and development activities.

These priorities were reiterated in the China Education Modernization 2035 issued in February 2019, with more specific measures incorporated. At the same time, the China Education Modernization 2035 recognizes the existence of disparities in 9-year compulsory education (primary and lower secondary education) between rural and urban areas and sets the goal of achieving high-quality and balanced compulsory education by 2035. Located in the northwest of the PRC, Gansu Province is poor, with gross domestic product per capita of CNY28,497 in 2017, recorded the lowest among all provinces in the PRC. It remains largely rural with an urbanization rate of 46.4% in 2017, significantly lower than the national average of 58.5%. Of 6,172 primary schools in Gansu Province in 2017, 4,675 (75.7%) were in rural areas. There were also 5,128 village primary teaching facilities which did not have all the grade 1-6 classes. Differences between urban primary schools and village primary teaching facilities are distinct. Whereas teachers teach a subject at urban primary schools, teachers teach multiple subjects at village primary teaching facilities. There is a shortage of qualified English, art, music, and physical education teachers in rural areas because they are not attracted to work in rural areas. Moreover, village primary teaching facilities have significantly less instructional resources, and provide less diverse learning opportunities for students than urban primary schools. Although the working condition in rural areas, and therefore the challenges rural teachers face, are different from urban areas, training programs that address specific needs of teachers in rural areas are scarce. Such training programs are needed especially to implement the curriculum that emphasizes the development of students' core competencies, requiring fundamental changes in teaching learning methods. Consequently, students in rural areas, especially at village primary teaching facilities, are disadvantaged in developing core competencies.

Gansu Province's Thirteenth Five-Year Education Development Plan reflects the specific condition described above, while mirroring the national priorities for the curriculum reform. As of March 2019, significant progress has been made in improving the deployment of qualified teachers in rural areas; increasing training for teachers in rural areas; equipping all primary schools, including village primary teaching facilities with ICT (computers, interactive whiteboards, videoconferencing equipment) and broadband internet connection; providing school breakfast, lunch, and bus services at rural primary schools and village primary teaching facilities; and shifting emphasis onto student comprehensive development by strengthening art, music, physical education, and school-based integrated practice activities.

Lanzhou, the capital of Gansu Province, is at the forefront of education development in the province. The municipality has 742 primary schools, of which 259 are in rural areas, as well as 154 village primary teaching facilities. There are two national certified pre-service and in-service teacher training institutes (Northwest Normal University and Lanzhou City College) and some provincial certified in-service teacher training institutes (Lanzhou Institute for Education Research, Lanzhou Branch of Beijing No. 2 Experimental Primary School, and Lanzhou Experimental Primary School) in Lanzhou, as well as the Lanzhou Audio-Visual Education Center which supports schools, teachers, and students in ICT matters. Over 90% of classrooms at urban primary schools and at least one classroom at the majority of village primary teaching facilities are multimedia equipped. The use of interactive whiteboards is common even at village primary teaching facilities. Since 2018, it has become possible to connect classrooms at urban and rural primary schools and village primary teaching facilities using videoconferencing equipment, to alleviate the shortage of qualified teachers in rural areas. Moreover, some advanced urban primary schools use student information and learning management systems, accessible via mobile phone, where teachers assess progress of each student after each lesson and provide feedback to students and their parents. They also encourage subject teachers to collaborate in planning, preparing, and delivering lessons around common themes.

However, except among teachers at advanced urban primary schools, many teachers still rely on teaching learning methods which put emphasis on the acquisition of subject knowledge rather than on the development of students' core competencies. Teachers are not sufficiently encouraged to collaborate in planning, preparing, and delivering lessons. Instructional resources to support teachers in adopting more student-centered and problem- and project-based methods are scarce. The use of formative and diverse assessment measures to track student progress and devise individualized instructional strategies is infrequent among teachers. Although teachers use ICT, their use is more for delivering subject knowledge to students rather than developing students' core competencies. Despite the ability to connect classrooms at urban and rural primary schools and village primary teaching facilities, its effectiveness in developing core competencies, especially for students at teaching facilities, is unknown given that their learning and home environments differ considerably, and joint planning and preparation of lessons between these schools and teaching facilities are not conducted.

These issues are common not only in Lanzhou or the PRC, but also in other countries. More research is needed, for instance, on how the development of core competencies could be integrated into the curriculum and lessons; what teaching, learning, and support systems and instructional resources could better help develop students' core competencies; how ICT could be used to develop students' core competencies and adapt the curriculum to individual student needs; and how ICT could be used to reduce gaps in education service delivery and quality.

Impact	High-quality and balanced primary education delivered (China Education Modernization 2035 and Gansu Province Thirteenth Five-Year Education Development Plan)
Outcome	Enhanced ICT-enabled teaching, learning, and support systems and resources in primary education increased
Outputs	Existing teaching, learning, and support systems and resources, and use of ICT in primary education assessed National and international good practices and lessons in building students' core competencies and addressing rural-urban disparities in primary education through the use of ICT introduced New or improved ICT-enabled teaching, learning, and support systems and resources in primary education piloted
Geographical Location	Gansu

Summary of Environmental and Social Aspects	
Environmental Aspects	
Involuntary Resettlement	
Indigenous Peoples	
Stakeholder Communication, Participation, and Consultation	
During Project Design	
During Project Implementation	
Business Opportunities	
Consulting Services	ADB will engage the consultants following the ADB Procurement Policy (2017, as amended from time to time) and its associated project administration instructions and/or staff instructions.
Procurement	The TA resources will be disbursed following ADB's Technical Assistance Disbursement Handbook (2010, as amended from time to time).
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Responsible ADB Department	East Asia Department
Responsible ADB Division	Urban and Social Sectors Division, EARD

Executing Agencies

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Timetable

Concept Clearance	22 Apr 2019
Fact Finding	06 Mar 2019 to 12 Mar 2019
MRM	-
Approval	-
Last Review Mission	-
Last PDS Update	24 Apr 2019

Project Page	https://www.adb.org/projects/52237-001/main
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