

PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: PIDA118627

Project Name	China: Guangdong Compulsory Education Project (P154621)
Region	EAST ASIA AND PACIFIC
Country	China
Financing Instrument	Investment Project Financing
Project ID	P154621
Borrower(s)	PEOPLE'S REPUBLIC OF CHINA
Implementing Agency	Guangdong Department of Education
Environmental Category	B-Partial Assessment
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Appraisal Review Decision (from Decision Note)	
Other Decision	

I. Project Context

Country Context

China's economy grew 10 percent a year on average over the last three decades. Over 500 million people were lifted out of poverty during this time (World Bank and Development Research Center of the State Council, 2013). Since the national law on compulsory education was passed in 1982, access to education has significantly improved. While the basic education cycle spans 15 years, a nine-year education cycle comprising primary and junior secondary school is compulsory for the nation's children. The adult literacy rate has increased from 66 percent in 1982 to 96 percent in 2015. In addition to improvements in access, results from international student assessments – such as the Organisation for Economic Co-Operation and Development's (OECD) Program for International Student Assessment (PISA) – demonstrate that the country is home to some of the best performing school systems in the world (World Bank, 2016).

This socioeconomic progress of the past 30 years has raised the well-being of the population. China has made large strides in human development in terms of increased average life expectancy, education, and average income. As a result, its Human Development Index (HDI) increased from 0.50 in 1990 to 0.73 in 2014. Despite this improvement, the country is ranked at 90 out of 188 countries and economies in terms of the HDI and is behind most advanced countries

As an accompanying measure of China's reform towards a market-oriented economy, the central government relinquished much of its control in education to local authorities. With increased

responsibilities from the decentralization process, local governments also bore more financial costs. While central and provincial governments both continue to provide earmarked funds, ultimately local county governments are responsible for ensuring that all children receive quality compulsory education. The decentralization process has led to deep and far-reaching changes in the organization of education by introducing more efficiency in the funding process.

However, as a consequence of decentralization, there is great regional disparity in local educational performance which is heavily affected by disparities in regional economic performance. Approaches to school management, available education resources, and the quality of teachers and teaching vary widely across the country – especially between urban and rural areas. A dearth of well-trained teachers, fewer financial and physical resources, and poor school management all lead to lower educational attainment in rural areas. This is particularly important as such gaps can disproportionately affect disadvantaged groups such as children left-behind by migrant parents and children with disabilities. Perhaps most importantly, in combination they lead to poorer learning outcomes for all students. Having recognized this as a major challenge, the Chinese government has sought to promote fair access to quality education by allocating a greater share of funds for public education to remote and poor areas. It is also working to unify urban and rural mechanisms for funding compulsory education.

As China strives to become a modern, harmonious, and creative society, a key priority will be ensuring equality of both quantity and quality of education. This was underscored in the 2016 Report on the Work of the Government. Among other goals, this document stresses that China needs to ensure that all schools providing compulsory education comply with education standards. To achieve this goal will require not only an improvement in learning facilities but also in the quality of teaching staff and their teaching practices. Specifically, students and teachers will need to have the requisite facilities available at the school level, and school systems will need to have adequate capacity to train their teachers and principals. Meeting this goal will also necessitate a mechanism for quality assurance – both of the training content and of the training delivery mechanism. Effective training programs would in turn lead to demonstrable changes in classroom teaching practices. In addition, improved approaches to financing and managing education will be critical to meeting the country's evolving needs.

Guangdong is China's most populous province with over 107 million people. The province is also the largest economy in China and has historically boasted a 13 percent annual gross domestic product (GDP) growth rate since 1981. In 2016, the national average growth rate was 6.7 percent (National Bureau of Statistics of China, 2017) while that in Guangdong was 7.5 percent. However, the remarkable economic progress of Guangdong has occurred hand-in-hand with increasing urban-rural disparities. The urban-rural income gap ratio (nominal) has increased from a 1.7 in 1980 to above 3.0 in 2010.

However, the remarkable economic progress of Guangdong has occurred hand-in-hand with increasing urban-rural disparities. The urban-rural income gap ratio (nominal) has increased from a 1.7 in 1980 to over 3.0 in 2010 (see Figure 1). These disparities are particularly stark in the proposed project counties where a large share of the population is rural and continues to be employed in agriculture. In such counties, the GDP per capita is substantially lower than that of the province as a whole and large numbers of students enrolled in basic education in these counties are classified as poor.

Addressing this inequality in access to high-quality education is a critical first step in expanding opportunities for all and promoting growth. As the country seeks to transition from middle- to high-income status investments in reducing social inequality and ensuring access to high quality education

for all will be crucial.

Urban-rural disparity continues to persist not only in terms of incomes but also in terms of access to high quality public services. In part, this has to do with the existing system for financing and managing public services – a system anchored at the county level and based on the residency registration status (hukou) of individuals. Historically, this system has been characterized by substantial disparities in spending across areas and regions. (See Tsang and Ding, 2005, specifically on education; Zhang and Kanbur, 2005, on health and education; World Bank, 2014 on a wider range of services.) A key priority going forward is to reduce social inequality, which will require ensuring equality of both quantity and quality of education. In recent years, while substantial efforts have been made to reform the household registration (hukou) system nationwide, these reforms target only certain urban migrants, defined by their employment record, education level and housing situation. As a result, the hukou system continues to be a challenge for a number of migrants unable to meet the criteria.

Sectoral and Institutional Context

Guangdong province typifies the successes and challenges of the education sector in China more broadly. As a driver of China's growth, Guangdong has been on the leading edge of several reform efforts. These reforms have been successful in allowing the province to post high enrollment and completion rates in primary education. While access to junior secondary education has improved across generations, corresponding indicators for junior secondary show some room for improvement (World Bank, 2011).

Like the rest of China, Guangdong has made significant achievements in virtually universalizing basic and junior secondary education. In 2014, Guangdong's province-wide net enrollment rate for school-age children was 99.9 percent, and the percentage of primary school graduates entering junior secondary school was 96.2 percent. Guangdong is also well on its way to universalizing senior secondary education with a gross enrollment rate in senior secondary schools of 95.9 percent in 2014 (Guangdong Statistical Yearbook, 2015).

12. However, compared to the rest of the country, Guangdong underinvests in its education sector. Based on data from 2015, public expenditure per student (PEPS) of Guangdong was lower than the national average in both primary and secondary education. In particular, for rural primary education, Guangdong's PEPS (3529 RMB in 2010, equivalent to 519 USD) only accounts for 77% of the national average (4560 RMB in 2010, equivalent to \$671 USD) and 87% of Gansu's PEPS level (4064 RMB in 2010, equivalent to 598 USD). Its expenditure on education as a share of GDP was only 2.6 percent – much lower than the national average of 4.2 percent. This is due partly to disproportionately low educational transfers received from the central government. In 2012, Guangdong was only allocated 555 million RMB (US\$91 million) in educational transfers from the central government, which is only 2 percent of the total education transfers provided nationwide. This percentage is relatively low considering that Guangdong's share of students enrolled in compulsory education is 8.5 percent in 2012. As a result, the transfers allocated in compulsory education per student is only 227 RMB (US\$37) in Guangdong, which is only one fourth of the national average amount.

There exists a gap between urban and rural spending on education in Guangdong. This gap is reflected in the urban-rural differences in the educational qualifications of 25-35 year olds. The spending gap is a critical issue as a wealth of literature shows that positive educational outcomes are associated with adequate funding and efficient spending (Jackson et al, 2014; Rajkumar and Swaroop, 2007; Verhoeven et al., 2007).

Educational inequality between urban and rural areas manifests itself in various forms, ranging from

urban-rural gaps in operational and maintenance expenses (O&M) to gaps in number of available textbooks to gaps in educational performance. Recent evidence from a study of 10 provinces (including Guangdong) suggests that the education performance of rural children is significantly lower than that of their urban counterparts even after accounting for differences in personal attributes. Urban 10-15 year-old children perform significantly better in objective test scores than their rural counterparts in math (0.54 standard deviations) and reading tests (0.75 standard deviations) (Zhang, Li, and Xue, 2015). This gap does not change as children go from primary school to junior secondary school, implying that the gap does not get better as children get older and obtain more education.

In 2015, Guangdong participated in the Programme for International Student Assessment (PISA) test along with Beijing, Shanghai and Jiangsu. The urban-rural achievement gap for these four provinces is 79 points in reading, 71 points in mathematics and 73 points in science, which is equivalent to approximately 2.5 years of schooling. While individual provinces cannot be identified in the data, given that most the rural students who participated in this administration of PISA come from Jiangsu and Guangdong, it is reasonable to assume that the observed urban-rural gap is representative of the gap in Guangdong.

Inequality in spending between urban and rural schools also results in disparity in education quality and impedes the province's development agenda. The lack of educational resources results in insufficient infrastructure, faculty, and operational resources. According to a 2014 survey by the Ministry of Education, which randomly sampled schools in 41 municipalities in Guangdong, some of the main issues reported were understaffed faculty and an imbalance of subjects offered in some of the rural schools.

Other challenges include:

(a) Inadequate facilities and equipment at the school level. In recent years, the provincial government has made great efforts to reduce overcrowded classrooms. However, as of 2014, in parts of the province, 17 percent of junior secondary school classrooms and 8 percent of primary school classrooms were still overcrowded in the sixteen project counties. The government defines overcrowded classrooms as those with more than 45 students in primary schools and those with more than 50 students in junior secondary schools. In contrast, only 2 percent of junior secondary school classrooms and 4 percent of primary school classrooms were overcrowded in other counties in Guangdong with similarly low GDP per capita. Schools in parts of the province also lack teaching equipment and materials. Recent data suggest that in the case of junior secondary schools the situation is not improving equally everywhere.

(b) A training system for teachers and principals that is in need of strengthening. Assessments of the training system in the province reveal a need to improve existing in-service training. This will require a focus on both the content of and the mechanism for delivery and subsequent mentoring of teachers. The urban-rural inequalities in the training system are also reflected in teachers' credentials. In poorer rural counties, the percentage of elementary school teachers with an associate's degree is 87.3 percent, which is 5 percentage points below the provincial average, and the percentage of secondary school teachers with a Bachelor's degree is only 59.8 percent, which is 17 percentage points below the provincial average. Rural teachers are less exposed to modern pedagogy and equipment and have a more traditional teaching style, one that is more "teacher-centered." Consequently, the teaching and learning process is less interactive and students are less engaged than in urban schools. Due to the lack of funding for school assets, such teachers also lack experience using information and communications technology (ICT) or laboratory equipment. While substantial numbers of teachers are trained by the province in a variety of disciplines, the province lacks a quality assurance and monitoring and

evaluation (QAME) system. Thus, it is unclear whether teachers are able to translate training into improved teaching practices in the classroom.

In addition to overcoming existing challenges, the province seeks to prepare for the future by undertaking a process of "modernizing the education system." As part of its bid to modernize the education system, the province seeks to identify approaches for:

(a) Enabling inclusive education. The Chinese government ratified the Convention on the Rights of Persons with Disabilities (CRPD) in 2008, which obliges it to develop an inclusive education system in which the general education system is fully accessible to children with disabilities. The national and provincial governments are increasing the coverage and amounts of social security benefits for households with disability. However, these benefits are not enough to offset the average private cost of disability on households with a disabled person, which is 18-31 percent of the total income of urban and rural households, respectively (Loyalka, Liu, Chen, and Zhang, 2014). The high prevalence of disability among the poor and the significant financial burden imposed on households with a disabled person underscore the importance of ensuring inclusive education for disabled children.

(b) Supporting left-behind children. Parts of the Guangdong education system, in particular, face additional challenges as approximately 1 million migrant workers leave their children behind in rural areas. These children are thus left without a key aspect of support most other children are able to rely on during their schooling--their parents. Video diaries have been used to document how the home lives of left-behind children provided them with less support for education than those of children residing with their parents (UNICEF, 2014). Thus schools in rural areas--already struggling with low resources--also have to provide a critical missing element of care for these left-behind children.

(c) Providing opportunities for overall development and improving the system for assessing the quality of education. The provincial government of Guangdong recognizes the importance of nurturing all aspects of a child's development. As such, it is in the process of developing a multi-dimensional measure of child development and seeks to use this new measure to assess how schools are doing, as well as to evaluate whether and how well initiatives to improve the quality of education are working.

Since 2010, the Guangdong provincial government has been undertaking a two-phase program, the Guangdong Education Create Strong Schools (Chuang Qiang) and Modernization Program (GECQMP), to address these challenges. The main goal of is to create the conditions to ensure universal access to quality education between 2010 and 2020. This program aligns with the national government's reform agenda as encapsulated in the Long-Term Reform and Development Plan (2010-2020) as well as Guangdong's own long-term education reform and development plan. Acknowledging the challenges the province faces in education, each phase of the GECQMP has distinct objectives.

(a) Phase 1 (Chuang Qiang) seeks to strengthen the regulatory environment, school management, teaching quality, enrollment, curriculum, and school facilities. The government plan is designed to ensure equal access to educational resources and infrastructure for all children in both urban and rural areas. At the elementary and junior school levels, this includes the priority provision of ICT using an approach referred to locally as Ban Ban Tong, connecting classrooms. This approach was selected so that teaching demonstration can be done electronically using multimedia. All classrooms with this package can connect to online educational resources and to each other. This provides a platform for ensuring that both urban and rural classrooms have the same access to information. Phase 1 also includes laboratories and libraries for all schools, renovation and rebuilding of classrooms meeting government standards, expansion of play grounds, provision of multi-function activity rooms for children with disabilities, social support to left-behind children, and affordable housing for teachers in

rural areas.

(b) Phase 2 seeks to modernize the education system. The government plans to transform the province into a modern education hub for southern China in order to build a "people-centered, equitable, and efficient" education system. This includes mandatory training and re-training of teachers and principals, and an enriched curriculum reflecting a more competency-based, results-oriented approach to teaching, learning, and integrated life skills.

In its implementation plan, the Guangdong government has set an objective that by 2020, all counties meet Phase 1 Chuang Qiang standards and 85 percent of the counties meet the Phase 2 "modernization" standards. Over the past four years, most of the schools in urban areas have been certified as having met the Chuang Qiang standards. Some schools in Guangzhou city have even been selected as outstanding model schools, typifying the new "people-centered, equitable, and efficient" education system. However, progress towards these objectives has been uneven across the province.

The project counties report that on average 18.7 percent of students are in poverty. This is orders of magnitude higher than the overall poverty rate in Guangdong. This is perhaps unsurprising given that the GDP per capita in project counties is 30 percent of the GDP per capita in the province overall. 20 percent of the GDP in the counties comes from agriculture while for the province overall 1.7 percent does. 74 percent of the population in these counties is rural compared to 32 percent of the population of the province overall.

The project counties are mainly located in the less developed eastern, northern, and western regions of the province. The total population of these sixteen counties is 20.3 million (equivalent in size to the population of Sri Lanka or Romania), equivalent to 18.9 percent of total permanent residents in Guangdong. The students enrolled in basic education in project counties account for more than a third (34.2 percent) of all students enrolled in basic education in Guangdong. Despite the large share of population in these counties, their total GDP only accounts for a 5.9 percent of provincial total GDP. As a result, the GDP per capita is also very low in project counties. The level of GDP (nominal) per capita in Guangdong province in 2014 was 63,232 yuan per person. In contrast, in the sixteen counties where the Guangdong Compulsory Education Project will take place, GDP per capita was only a third of that of the province (at 22,981 yuan per person). Even when compared to China's national average, the project counties have substantially lower GDP per capita (nearly half). Moreover, between 2010 and 2014, GDP per capita has been growing at a slower rate in the project counties (17 percent) than the province as a whole (24 percent).

Public primary and junior secondary schools in 16 counties lag behind in achieving the Chuang Qiang objectives. As a result, the project will focus on these counties as they lag behind the rest of the province in terms of meeting government reform targets. Underscoring the project's equity focus is the fact that they are drawn from two of the highest need groups used by the provincial government to allocate education subsidies for operating costs. The counties are: Chaoan, Chaoyang, Dianbai, Haifeng, Huazhou, Huilai, Jiexi, Lianjiang, Leizhou, Lufeng, Luoding, Puning, Suixi, Wengyuan, Wuchuan, and Wuhua.

The project counties also have disproportionately low government revenue, which only accounts for 2 percent of total government revenue in Guangdong. The 16 project counties' government revenue per person is approximately a third of that of Guangdong. The low GDP and fiscal revenues in the project counties translate into low education spending. Consequently, these counties face a common set of challenges ranging from fewer students with education beyond the compulsory level to lower per student spending in compulsory education. This is particularly striking as these gaps are evident even

when these counties are compared to others within the province with similar levels of GDP per capita

Due to lower levels of income and government spending, project counties have poorer school facilities. On average, 27.2 percent of all classrooms in project counties are overcrowded. This is 1.5 percentage points higher than the provincial average. This is despite much improvement from the Chuang Qiang initiative in recent years. Average spending on facilities is 835 RMB and 1099 RMB per person for primary and lower secondary school, respectively. These amounts are only approximately half the average amount spent on facilities per person at the provincial level, which is 1,545 RMB and 2,035 RMB per person at primary and lower secondary school levels, respectively. Consequently, the coverage of Ban Ban Tong is low. At the primary school stage, the coverage of Ban Ban Tong is only 30.3 percent, compared to 51.7 percent for the province overall. For lower secondary school, the coverage is 48.5 percent among project counties, while it is at 68.8 percent at the provincial level.

The project counties also lag behind the provincial average in terms of teaching resources. Despite the fact the project counties have 34.2 percent of Guangdong's students enrolled in basic education, they only have 24.2 percent of all basic education teachers, indicating a lack of teaching resources. A particular challenge for these counties is the availability of school-provided accommodations for teachers. In terms of quality, the percentage of teachers with an associate's degree or above is 87.3 percent versus 93.1 percent at the provincial level. The percentage of teachers with an advanced qualification is only 4.9 percent versus 10.8 percent at the provincial level.

The project counties lack an adequate support system for vulnerable children, ranging from those left behind to those with disabilities. Due to a lack of economic opportunities, many children are left behind in the villages by their parents who seek work elsewhere. The project counties have a total of 297,000 left-behind children without parental care. They also have 3,797 special-needs children. Given the large demand for additional support, local governments need to identify options for providing support to these populations.

The proposed project is being designed to provide financial and technical support to help these counties overcome the range of challenges just described. Activities under the project will not only address resource gaps in the short term but lay the foundations for systemic reform in the long term. Activities have been designed so that the target counties can catch up with the rest of province in achieving the goals of the government's program. In order to lay the foundations for systemic reform, several project activities will be designed as pilots and will be evaluated in terms of impact, efficiency, and cost-effectiveness. The findings of the pilots will be used by the provincial DoE to guide future reforms.

II. Proposed Development Objective(s)

The project development objective is to improve learning facilities and teaching quality in selected public primary and junior secondary schools in project counties.

III. Project Description

Component Name

Component 1: Improve school equipment and facilities

Comments (optional)

This component will have two subcomponents. Subcomponent 1 will focus on school equipment. It will support the installation of Information and Communications Technology (ICT) equipment in classrooms. In addition, it will support the development of digital educational content as well as a

management system for a virtual learning community of teachers. Subcomponent 2 will focus on school facilities. It will support the construction of classrooms. It will also support the construction of accommodations for teachers, particularly in rural locations. This subcomponent will be financed by counterpart funds.

Component Name

Component 2: Strengthen the training and assessment system for teachers and principals

Comments (optional)

This component will have three subcomponents. Subcomponent 1 will support improvements in existing training content for in-service training of teachers and principals as well as the development of new training content. The training content that will be developed will be shared online. Subcomponent 2 will support improvements in the current system for delivering training and providing mentoring to teachers. Subcomponent 3 will assist in strengthening the quality assurance, monitoring, and evaluation (QAME) system for teacher continuous professional development (CPD). This system will use classroom observations to assure the quality of training teachers receive.

Component Name

Component 3: Pilot reforms to improve equity and quality of education

Comments (optional)

This component will have pilot initiatives focused on improving equity and quality and assess their impact, efficiency, and cost-effectiveness. Subcomponent 1 will support pilots to improve equity in compulsory education. This will include: (i) providing support left-behind children in public primary and junior middle schools; (ii) enabling inclusive education in primary and junior middle schools with a particular emphasis on children with mild to moderate disabilities; and (iii) providing mobile labs to schools that do not have laboratory equipment. Subcomponent 2 will support pilots to improve the compulsory education. This will include improving existing system of school partnerships to support teacher mentoring.

Component Name

Component 4: Project management and monitoring and evaluation

Comments (optional)

This component will strengthen and build capacity for monitoring and evaluation and project management. As such, this component will finance the costs associated with technical assistance, supervision of the project, M&E including sample-based survey for the results framework, training of project implementation personnel, study tours, workshops, seminars, office equipment, and office consumables.

IV. Financing (in USD Million)

Total Project Cost:	267.40	Total Bank Financing:	120.00
Financing Gap:	0.00		
Financing Source			Amount
Borrower			147.40
International Bank for Reconstruction and Development			120.00
Total			267.40

V. Implementation

The project will be implemented by the Guangdong Department of Education (DoE). A Joint Meeting (equivalent of a steering group) will be chaired by the Vice Governor of the province. It consists of Director General (DG) of DoE, Deputy DG of Department of Finance (DoF), and Deputy Director of Development and Research Commission (DRC). The Joint Meeting is responsible for the general direction of the project.

The provincial project management office (PPMO) will be located at the DoE and is headed by a Vice Director General of the DoE. The PPMO will have responsibility for the daily coordination of project implementation. It will work with relevant technical divisions and institutions at the provincial level and with the county project management offices (CPMO) to facilitate project activities. An expert panel, recruited locally, will facilitate the design and implementation of key activities.

The management structure and the institutional arrangements at the provincial level will be mirrored at the county level in each of the project counties.

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	X	
Natural Habitats OP/BP 4.04		X
Forests OP/BP 4.36		X
Pest Management OP 4.09		X
Physical Cultural Resources OP/BP 4.11		X
Indigenous Peoples OP/BP 4.10		X
Involuntary Resettlement OP/BP 4.12	X	
Safety of Dams OP/BP 4.37		X
Projects on International Waterways OP/BP 7.50		X
Projects in Disputed Areas OP/BP 7.60		X

VII. Contact point

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