



1. Project Data

Project ID P154621	Project Name China: Guangdong Compulsory Education	
Country China	Practice Area(Lead) Education	
L/C/TF Number(s) IBRD-87910	Closing Date (Original) 30-Jun-2023	Total Project Cost (USD) 117,406,153.93
Bank Approval Date 31-Oct-2017	Closing Date (Actual) 30-Nov-2023	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	120,000,000.00	0.00
Revised Commitment	117,406,153.93	0.00
Actual	117,406,153.93	0.00

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2. Project Objectives and Components

a. Objectives

According to the Project Appraisal Document (PAD, page 10) and the Loan Agreement (page 6), the project objectives were as follows:

- **To improve learning facilities and teaching quality in selected public primary and junior secondary schools in project counties.**



b. Were the project objectives/key associated outcome targets revised during implementation?

No

c. Will a split evaluation be undertaken?

No

d. Components

Component 1: Improve School Equipment and Facilities (Appraisal: US\$168.0 million; US\$160.8 million): This component was to support installation of information and communication technology (ICT) equipment in 15,200 classrooms, development of digital education content, construction and/or rehabilitation of 1,000 classrooms, and construction of dormitories to accommodate 5,200 teachers, particularly in rural areas. The ICT equipment consisted of the *Ban Ban Tong* (BBT) package with a combination of projector, computer, and white board, or an all-in-one multimedia system.

Component 2: Strengthen the Training and Assessment System for Teachers and Principals (Appraisal: US\$57.6 million; Actual: US\$54.6 million): This component was to support a holistic approach to develop new teacher training content for backbone teachers (experienced teachers who serve as mentors), principals, ICT use, and multi-subject teaching. Activities also included measures to assess the quality of teacher training, such as classroom observation, surveys, and self-assessments.

Component 3: Pilot Reforms to Improve Equity and Quality of Education (Appraisal: US\$39.8 million; Actual: US\$29.1 million): This component was to support interventions to improve equity by serving disadvantaged groups. Pilot programs included installation of activity rooms at 100 schools for left-behind children, resource rooms at 50 schools for children with disabilities, mobile labs for schools in hard-to-reach areas, and school partnerships between strong and weak schools for teacher mentoring.

Component 4: Project Management, Monitoring and Evaluation (M&E) (Appraisal: US\$2.9 million; Actual: US\$1.0 million): This component was to support M&E capacity building and project management.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project cost

- The appraised project cost was US\$279.4 million. The actual project cost at closing was US\$297.4 million.
- Approximately US\$38.5 million of savings was realized due to cancellation of several activities and efficiencies in procurement. Most of these savings were then allocated to additional ICT procurement and teacher training.

Financing

- The project was financed by an IBRD Loan in the amount of US\$120.0 million. The actual amount at closing was US\$117.4 million.



- Bank financing was focused on more "forward-looking" elements of the provincial education program, such as ICT and equity pilots. Counterpart financing was focused on more "conventional" activities such as classroom and dormitory construction, and pre-service teacher training.

Borrower contribution

- The planned Borrower contribution was US\$159.4 million. The actual Borrower contribution at closing was US\$180.0 million.

Dates

- *October 31, 2017*: Project approval.
- *April 2, 2018*: Project effectiveness.
- *March 28, 2022*: Mid-term review.
- *June 13, 2022*: Several intermediate outcome indicators were revised upward following funds reallocations due to significant project savings (decrease in ICT prices, procurement efficiencies), exchange rate fluctuations, cancellation of digital education content activity (due to introduction of a large government program on national curriculum digital textbook application) and external training activity (due to COVID), and cancellation of pilot mobile lab activity after two had been procured.
- *June 23, 2023*: The project closing date was extended from June 2023 to November 2023 to allow for completion of impact assessment and construction activities.
- *November 30, 2023*: Project closing.

3. Relevance of Objectives

Rationale

China's economy has steadily grown over recent decades, and while human development indicators have improved (Human Development Index scores increased from 0.50 in 1990 to 0.73 in 2014), they still lag behind most advanced countries. The urban-rural income gap ratio has increased from 1.7 in 1980 to over 3.0 in 2010, reflecting income inequalities despite overall economic progress in the provinces. The national law on compulsory education (nine-year cycle of primary and junior secondary education) was passed in 1982 and has led to improved access to education. Guangdong province, China's most populous province with the largest economy, has achieved a net enrollment rate for school-age children of 99.9 percent. The percentage of primary school graduates entering junior secondary school is 96.2 percent. Due to recent decentralization reforms, local county governments now bear the primary responsibility for the financing and delivery of basic education. In Guangdong, this has led to increasing disparity, including in the availability of education resources (infrastructure, faculty, and operational resources) and quality of teaching, especially between urban and rural areas. Disadvantaged groups are disproportionately affected, including "left-behind" children (those left behind by approximately 1.0 million migrant parents, of whom 297,000 are in the project counties) and children with disabilities.



China's National Plan for Medium- and Long-Term Education Reform and Development (2010-2020), in place at the time of appraisal, highlighted the necessity to make education more student-oriented by reforming teaching content and methods and to direct more resources to disadvantaged areas. At the provincial level, the education reform program "Guangdong Education Create Strong Schools and Modernization Program 2010-2020" aimed to reduce disparities in school facilities, teacher allocation, and basic education resources, and to connect all classrooms through information technology.

The Bank's Country Partnership Strategy for FY20-25 identifies addressing educational disparities within its key objective area of strengthening the quality of early learning and skills development programs.

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To improve learning facilities in selected public primary and junior secondary schools in project counties.

Rationale

The theory of change was clear. The planned activities to equip classrooms with ICT (to facilitate teaching and learning) and develop digital education content, alongside parallel government-financed activities to build classrooms and teacher accommodations, were likely to lead to the intended outcome to improve learning facilities. The theory of change (and the results chain and indicators) was primarily focused on technology integration in the classrooms.

The 16 project counties were selected based on low income level (gross domestic product per capita was one-third of the provincial average) and having substantial shares of poor students (on average 19.3 percent).

Outputs

A total of 2,247,895 students directly benefited from project interventions (target: 1,730,000).

- 41,101 classrooms installed with ICT (original target: 15,200; revised target: 39,350). The government standard (*Ban Ban Tong* package) was comprised of a projector, computer, and white board, or an all-in-one multi-media system.
- Construction and/or rehabilitation of 961 classrooms (target: 1,000), according to government construction standards.



- Construction of teacher dormitories in rural areas according to government regulations (target: 5,200) was planned, but the ICR did not report any results of this activity.
- Planned development of digital education content for students was dropped, as it was taken up by a separate government program.

Outcomes

- 100 percent of classrooms were using the newly installed ICT as of project closing, as verified through administrative records, spot checks, and Bank supervision missions. This surpassed the target of 70 percent.
- An evaluation conducted by Guangzhou University in late 2021, which covered 160 schools and over 45,000 beneficiaries (students, teachers, and parents), found that more than 80 percent of teachers were using the all-in-one machine and the projector stand frequently, and more than 80 percent of students felt that the BBT platform helped them to learn more and better. Responses were "very positive" about the BBT, specifically among teachers, who felt that it helped them to prepare better for classes, share quality resources and teaching experiences with others, use master classes, and access a larger variety of resources, and among students, who felt that classes were more interactive. The evaluation also noted that (i) many schools used the platform to collect and record teaching/learning activities and share teacher-developed resources; (ii) student evaluations and assessments have changed in many schools, as teachers can record and analyze students' learning progress and provide feedback; and (iii) the BBT has functioned like continuous in-service training, since teachers were able to watch expert lectures, observe good examples, or exchange and get feedback on lesson plans, courseware, and lessons (as reported in ICR, page 8).

Achievement is rated High, due to evidence of ICT installation and utilization in project classrooms, which surpassed targets.

Rating
High

OBJECTIVE 2

Objective

To improve teaching quality in selected public primary and junior secondary schools in project counties.

Rationale

The theory of change was clear. The planned activities to improve teacher training content and delivery (for both pre-service and in-service training), training in school management for principals, and quality assurance mechanisms to ensure continuous professional development were likely to lead to improved teaching quality.

Outputs

- 14 teacher training courses improved/developed (target: 14), covering short-term, long-term, pre-service, and in-service teacher training, school management training for principals, and ICT use in classrooms. Of these, all 14 courses were approved by an expert panel (target: 14).



- 70,307 total teachers trained (target: 51,300). This included 68,843 teachers trained in ICT (target: 60,000), 859 backbone teachers trained in mentoring other teachers, and 532 principals trained in school management. In addition, 2,984 teachers received short-term training in multi-subject teaching, and 2,394 teacher trainees were undergoing a five-year pre-service training (first round graduating in 2024, second round in 2025). (Note: There is some overlap in the number of teachers trained in each category, particularly for ICT.) The proportion of participants who were satisfied with the quality of training content ranged from 85.5 percent of backbone teachers to 86.3 percent of ICT-trained teachers (target: 75.0 percent).
- Implementation of quality assurance mechanisms for continued professional development for teachers, including questionnaires for training participants, a classroom observation tool, and knowledge tests.

In addition, the project financed several important pilot activities that were expected to contribute to the longer-term goals of improved education, though not directly to immediate project outcomes:

- “Left-behind children” pilot: 100 schools set up activity rooms, provided computers and phones for parents to communicate with children, organized cultural and sports activities, trained teachers on psychological counseling, and established care service working groups composed of principals and staff. Children received an average of one hour of support per day.
- Inclusive education pilot: 50 schools set up resource rooms with furniture and equipment, and working groups were established to provide special support to children with disabilities.
- 724 activity and resource room teachers were trained (target: 200).
- School partnerships pilot: 500 weaker schools were partnered with 500 stronger schools to improve teaching practices and administrative leadership (for example, by sending teachers to stronger schools for on-the-job learning).
- Mobile science labs pilot: 14 mobile science labs were planned to address the shortage of trained science teachers, improve science teaching in rural areas, and provide hands-on learning opportunities to children. The pilot was discontinued due to limited time available to conduct open competitive bidding and conclude the contract before the project’s closing date. The two mobile labs that were completed have provided over 3,800 classes since February 2022.
- The government produced policy notes on each of the above pilots, which confirmed the scalability of three of the pilots. However, as reported in the ICR (page 11), no systematic evaluations were carried out.

Outcomes

The following outcomes are reported in the ICR (page 9) from a March 2022 assessment, based on classroom observations of 228 teachers in the 16 project counties (of which 90 were backbone teachers and 138 were BBT teachers). The teachers were randomly selected, with equal participant numbers in trained and untrained sample groups, thus offering a comparison of trained vs. untrained teachers at one point in time. Teachers were assessed through classroom observation, using an internationally validated tool called TEACH, which scores teachers in time management, classroom culture, instruction, and socio-emotional skills. The minimum threshold was set at 2.8 out of 5. An additional round of data collection was conducted in September 2023 to observe scores of this same group of teachers after training had been delivered.

In the 2022 data round:



- 95 percent of trained teachers (N=108) met the minimum threshold in targeted competencies compared to 87 percent of untrained teachers (N=99). While this surpassed the target of 70 percent, it raises the question of whether the threshold was too low, given that the target was exceeded by both trained and untrained teachers. (Note: The ICR (page 10) stated that the threshold was “set by the provincial authorities in the absence of baseline information” while the government subsequently responded that the threshold was determined by the Bank following an appraisal.
- 99 percent of trained BBT teachers (N=68) met competencies compared to 86 percent untrained (N=59). The largest subdomain increases were in socioemotional skills training, which increased from 30 percent to 49 percent; and in instruction, which increased from 91 percent to 99 percent.
- 89 percent of trained backbone teachers (N=40) met competencies, the same 89 percent as untrained (N=40).

In the 2023 data round:

- 97 percent of trained teachers (N=unknown) met the minimum threshold in targeted competencies, of which 100 percent backbone teachers (N=43) and 93 percent BBT teachers (N=unknown).

In a comparison of the 2022 and 2023 data rounds:

- The percentage of backbone teachers (N=43) who met the minimum threshold in targeted competencies increased from 88 percent to 100 percent. The largest subdomain increase was in socioemotional skills training, for which backbone teachers meeting competencies improving from 42 percent before training to 84 percent after training, with scores increasing from 3.33 to 3.83

In addition,

- 100 percent of trained backbone teachers, ICT teachers, and in-service multi-subject teachers passed the knowledge test after completing training. This surpassed the target of 75 percent.
- 85.5 percent of trained backbone teachers, 86.3 percent of trained ICT teachers, and 85.7% of trained principals were satisfied with the quality of the training content. This surpassed the target of 70 percent.

Achievement is rated Substantial due to evidence of improvements in teacher quality, comparing trained vs. untrained teachers in 2022 and also comparing improvements in scores among trained teachers from 2022 to 2023.

Rating

Substantial

OVERALL EFFICACY

Rationale



Achievement of the first objective to improve learning facilities is rated High due to evidence of technology integration in the classrooms, including surpassing of targets. Achievement of the second objective to improve teaching quality is rated Substantial due to evidence of improvements in teacher quality, comparing trained vs. untrained teachers in 2022 and also comparing improvements in scores among trained teachers from 2022 to 2023. Therefore, overall Efficacy is rated Substantial.

Overall Efficacy Rating

Substantial

5. Efficiency

At appraisal (PAD, Annex 5), an economic analysis was conducted in the form of a cost-benefit analysis. Benefits, stemming from activities in Components 1 and 2, were identified as improved learning outcomes, which would lead to increased future employability and wages. Additional social benefits such as reduced crime and improved political participation were expected to materialize but were not included in the calculation. Project benefits were estimated using existing evidence of similar education interventions in developing countries as well as those specific to the Chinese context. Project costs were estimated from present investment costs and incremental recurrent costs. The net present value (NPV) was calculated as US\$ 232 million and the internal rate of return (IRR) as 21.0 percent

At completion (ICR, Annex 4), the cost-benefit analysis was updated using actual project costs, actual number of beneficiaries, and improved assumptions/more recent estimates of effects on learning to calculate project benefits. In particular, given that the BBT intervention had the greatest number of beneficiaries and received substantial additional allocations after the project's mid-term review, the ICR's analysis used more up-to-date estimates of the use of ICT specifically in China (computer-assisted instruction/learning, particularly more intensive teacher training). The estimated NPV at completion was US\$ 422 million and the IRR 32 percent, which compares highly favorably to the rate at appraisal for the "high beneficiary" scenario (21 percent). The sensitivity analysis also showed that the results were highly sensitive to the effect sizes assumed for the ICT intervention: when the effect size is assumed to be 0.05, the IRR drops to 19 percent; when assumed to be 0.03, the IRR is just 9 percent.

Regarding implementation efficiency, there was a fall in prices of the BBT equipment leading to significant project savings that were used to increase the number of beneficiaries. This offset initial delays in the procurement of BBT packages, which were due to lengthy discussions on the bidding document (e.g. qualification requirements) and on the number of lots/contracts. There were minor shortcomings in initial implementation such as shortages of staff, high Bank and government staff turnover, and government rules preventing the hiring of consultants to perform responsibilities of government officials. The "value" of the pilot activities (at a cost of US\$29 million) is also undetermined due to the lack of information on benefits realized.

Efficiency Rating

Substantial



a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	21.00	72.40 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	32.00	72.40 <input type="checkbox"/> Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

Relevance is rated High due to strong alignment with country conditions, country/provincial sector strategy, and Bank strategy. Efficacy is rated Substantial due to High achievement of the first objective to improve learning facilities (due to evidence of technology integration in the classrooms, including surpassing of targets) and Substantial achievement of the second objective to improve teaching quality due to evidence of improvements in teacher quality, comparing trained vs. untrained teachers in 2022 and also comparing improvements in scores among trained teachers from 2022 to 2023. Efficiency is rated Substantial due to favorable cost-benefit ratios and evidence of implementation efficiency. These ratings indicate that there were only minor shortcomings in the project's preparation, implementation, and results, leading to an Outcome rating of Satisfactory.

a. Outcome Rating

Satisfactory

7. Risk to Development Outcome

The improvement in learning facilities is likely to be sustained for the short- and medium-term, through the installation of ICT equipment; however, issues of longer-term maintenance of the technology and digital content were not discussed in the ICR. Improvements in education quality due to increased teacher training are also likely to be sustained, owing to improved training content and feedback mechanisms for continued professional development. However, lessons from the key pilot activities to address inequities are unclear, as no systematic evaluations were carried out to inform policy directions.

8. Assessment of Bank Performance

a. Quality-at-Entry



While the Bank has been engaged in the education sector in China for decades, this project represented the first collaboration between the Bank and the Guangdong Department of Education in compulsory education. The project objectives and key interventions were relevant to government priorities and existing provincial capacity, with overall risk appropriately assessed as Moderate. While the results chain was straightforward and had a narrow focus that was monitorable and implementable, there were some shortcomings. Social inequalities (as reflected in income disparities, rural-urban disparities, school enrollment among disadvantaged groups, access to high-quality public services, and education outcomes) were featured in the discussion as a key area to address but were not included in key outcomes. Similarly, learning facilities were considered inadequate due to overcrowded classrooms and lack of teaching equipment and materials, while the key outcomes only included technology upgrades. Key outputs financed by the government but integral to the results chain were also not included. There were also some shortcomings in the M&E methodology; for example, the classroom observation tool did not capture the right elements in this project's context, and there was no clear plan to evaluate the pilots.

Quality-at-Entry Rating

Moderately Satisfactory

b. Quality of supervision

As noted in the ICR (page 16), high turnover in Bank task team leadership (four task team leaders in five and a half years) affected continuity of supervision and implementation support in the initial phases, with some project components not as closely supervised as others. However, during the later phases of project implementation, the Bank team provided effective supervision support, particularly in the context of the COVID-19 pandemic which affected supervision travel, including revising the M&E framework (addressing problems with the baseline survey, revising targets) and resolving bottlenecks in the procurement of ICT equipment. The latter subsequently led to considerable project savings and higher than expected outputs. However, as discussed in the ICR (page 21), one shortcoming was the lack of rigorous attention to the pilot activities, which were not systematically reviewed in the supervision missions. In particular, after the December 2018 mission that highlighted the Bank's concern about the quality of the plans for the pilots and their evaluation, the Bank's aide-memoires do not report regularly on the progress of the pilots, their content, or the method of evaluation, nor do the implementation support teams seem to have included the appropriate technical experts for these activities. The ICR did not report on whether there were any irregularities or qualifications to fiduciary issues,

Quality of Supervision Rating

Moderately Unsatisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization



a. M&E Design

The M&E design was adequate for particular aspects of the results chain, namely for the objectives and activities related to technology installation and utilization. Indicators in this area were measurable and relevant, including baseline and targets. Overall M&E arrangements were clear with regards to data collection, relying on existing school-level data arrangements to collect and then aggregate administrative data at the county and provincial level, and also quality assurance through spot checks. However, for other aspects of the results chain, the design and methodology were not as clearly delineated. There were no clear evaluative arrangements or key indicators for the pilot activities to ensure that these activities were systematically evaluated, although policy notes were prepared to inform scaling up decisions. Improvements in teaching quality were to be evaluated using an internationally validated classroom observation tool (TEACH), although as noted in the ICR (page 10), this was not the appropriate tool to capture the impacts of the broader and deeper professional development program (deepening teachers' knowledge of fundamental concepts of children's learning and pedagogical theories, provide mentoring to other teachers) provided to backbone teachers under the project.

b. M&E Implementation

Data were regularly collected by schools and counties as part of their standard monitoring processes, along with spot checks by the provincial office and the Bank supervision staff. An evaluation was also conducted by Guangzhou University on ICT utilization.

As noted in the ICR (page 18) and discussed above, the original design of comparing the improvement in teaching quality from the baseline for trained and untrained teachers could not be adhered to, due to the attrition of the sample (through transfers and departures). However, a third data round was conducted in September 2023 to provide additional information. Also, the government had prepared a draft proposal for evaluating two of the pilots (for "left-behind children" and inclusive education), but the Bank's supervision staff noted significant shortcomings, including a lack of clarity/timing on how the evaluation of the pilots would feed into the policy paper, which was a key intermediate results indicator, as the evaluations were expected to capture the impact, efficiency, cost-effectiveness of the pilots and produce recommendations for future policy making. Although the revised evaluation plans were to be submitted by mid-January 2018, there is no evidence of further discussions or technical support being provided by the Bank to improve the quality of these evaluations and for the other pilots in subsequent implementation support missions.

c. M&E Utilization

The ICR (page 19) reported that data were used by the project teams to monitor progress on construction, delivery of BBT equipment, and teacher training. Feedback from teacher training programs helped institutions delivering the programs to make marginal improvements. The three monitoring and evaluation tools – the knowledge test, participant questionnaire, and TEACH observations – were used in combination to observe training impact.

M&E Quality Rating

Substantial



10. Other Issues

a. Safeguards

The project was classified as an Environmental Category "B" project, triggering the safeguard policy (OP/BP 4.01) on Environmental Assessment. An Environmental Management Plan (EMP) was prepared at appraisal. During implementation, environmental management checklists were regularly completed by contractors and project schools, and environmental training activities were organized regularly. The ICR (page 19) reported that the mitigation measures in the EMP were "generally well implemented" by the project participants. Safeguards performance was rated Satisfactory throughout the project period.

The project also triggered the safeguard policy (OP/BP 4.12) on Involuntary Resettlement, and therefore a Resettlement Policy Framework was prepared. Although initially 31 households were identified for resettlement due to the construction, eventually only 16 households needed relocation following the resettlement survey carried out by Sun Yat-sen University. A social assessment was carried out, including for students from vulnerable groups such as left-behind children, students with disabilities, and low-income families. The ICR (page 20) reported that the establishment of a fair and transparent allocation system of teachers' dormitories was recommended in the assessment, but this was not clearly followed up in the implementation support missions.

b. Fiduciary Compliance

Financial management: At the beginning of the project, there were some delays in the payments to service providers and delayed submission of financial reports. These were mainly due to the insufficient number of project personnel, as well as personnel changes within project management offices. The ICR (page 20) noted that timely actions were taken to address issues identified by auditors, but it does not report on the specific issues or on whether audits were unqualified.

Procurement: The Bank provided significant technical support on the procurement of the BBT platform during every implementation support mission, particularly through the support of a Bank ICT specialist who was familiar with the local market, procurement of ICT equipment, and use of the technology, and who conducted spot checks and provided detailed feedback recorded in the aide-memoires. The procurement of mobile labs was a shortcoming due to a lack of experienced vendors. The ICR did not report on whether there were any procurement irregularities.

c. Unintended impacts (Positive or Negative)

None reported.

d. Other



11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Highly Satisfactory	Satisfactory	Relevance is rated High, Efficacy is rated Substantial, Efficiency is rated Substantial
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	
Quality of M&E	Substantial	Substantial	
Quality of ICR	---	Substantial	

12. Lessons

Lessons drawn from the ICR (page 22) and adapted by IEG:

- **Equipping classrooms with ICT can be an effective intervention to improve teaching if the technology enables teachers to better execute their daily tasks and provides them with additional resources to engage students.** Teachers also need to be trained in the use of the technology to ensure utilization in their classroom environments. Also, technology that is available in the local market helps improve sustainability and ensures availability of local technical support.
- **Evaluations of critical project activities need to be well considered during the appraisal stage to ensure opportunities to gather robust baseline data and proper evaluation design.** In the case of this project, the different types of teacher training (i.e BBT vs. backbone teachers) required evaluating different dimensions of teacher practices. Also, piloting of the instrument in the local context would have helped understand the baseline distribution of pedagogical practices and set meaningful targets. Lastly, the key pilot activities on equity were not clearly delineated and therefore were not carried out effectively.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR was concise, and consistent with guidelines. The quality of the evidence was sufficient, although the interpretation of the data had shortcomings (i.e. weak attribution to project interventions, as trained and untrained teachers demonstrated competencies and surpassed targets) and the presentation of findings was unclear at times in terms of which data sources were being compared (i.e. 2022 untrained vs. trained teachers; 2022 trained teachers vs. 2023 trained teachers). The region and government subsequently provided clarifications through a written response. The ICR was candid in its discussion of shortcomings in the project's



theory of change. Given the six-year implementation period and intense focus on improving teacher quality, a more robust evidence base on teacher training outcomes was expected. Lessons were relevant for consideration in future ICT in education projects.

a. Quality of ICR Rating
Substantial