Report Number: ICRR0023627

1. Project Data

Project ID	Project Name
P152096	Supporting Edu Reform in Targeted Circui
Country	**Practice Area(Lead)**
Ecuador	Education

L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
IBRD-85420	31-Dec-2020	116,014,616.15
Bank Approval Date	**Closing Date (Actual)**	
14-Oct-2015	31-Dec-2022	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	178,000,000.00	0.00
Revised Commitment	125,300,000.00	0.00
Actual	116,014,616.15	0.00

Prepared by	Reviewed by	ICR Review Coordinator	Group
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2. Project Objectives and Components

a. Objectives

The objectives of the project were to increase enrollment in Early Education and improve the persistence rate in Lower Secondary Education and Upper Secondary Education in the Targeted Circuits (Loan Agreement, dated January 28, 2016).

During implementation, applicable revisions associated with updated baselines marginally reduced the outcome target for 4-year-olds enrollment (from 7,710 to 7474 students), and for persistence from lower to upper secondary from 78.11 percent to 77.29 percent (ICR, p. 32). Both original and revised targets were met.

Therefore, this ICR Review does not apply a split rating methodology, as it would be inconsequential to the assessment of efficacy.

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

Yes

Did the Board approve the revised objectives/key associated outcome targets?

No

c. Will a split evaluation be undertaken?

No

d. Components

Component I. Improving school services in targeted circuits (Total: US$196.8 million, World Bank: US$174.5 million; Actual: US$103.4 million). The component aimed at improving the quality of education services and increasing enrollment and graduation from early childhood to upper secondary education, and to enable a more efficient allocation of existing physical and human resources. The four key policies to improve the quality of education services to be financed by the component were: (i) the reorganization of school supply, by consolidation of schools into “hubs”, and upgrading the infrastructure and facilities; (ii) in-service and master level training of teachers and master level training for principals; (iii) the implementation of 'Online Educational Community' activities at the school level and; (iv) the enhancement of special education and programs for children with disabilities, with the latter contributing to increased inclusion.

Sub-Component 1.1. Infrastructure, Equipment and Furniture for Schools Hubs. This sub-component would finance the technical design, construction, acquisition of equipment and furniture and supervision of school hubs in the targeted circuits, including the construction of new schools called Millennium Schools, and renovations and expansions of existing schools. School hubs would encompass the Ministry of Education (MINEDUC) standards for integrated school hubs, including: infrastructure facilities to accommodate students throughout the full education cycle, from early education to upper secondary; physics and chemistry labs, language classrooms, pedagogic Information and Communications Technologies (ICT) equipment, school cafeterias, sports fields and facilities for school faculty and teachers. Transportation of students to hubs (to be financed by the government) would be based on MINEDUC’s criteria on distance, travel time, and safety standards. Annual Transportation Reviews would be conducted to verify compliance with the arrangements for school transportation for each school hub built under the Project. It was expected that around 45 percent of the students belonging to the targeted circuits (and about 70 percent of upper secondary students) would benefit from the new high-quality facilities that foster retention and graduation by improving children’s daily experience at school and by providing skills that are demanded by the labor market. The reorganization of the school supply into hubs would be expected to result in efficiency gains driven by the reduction of small schools and better utilization of physical and human resources, and contributing to improved service delivery.

Sub-Component 1.2. Professional Development for Teachers and Principals. This sub-component would finance: (i) in-service teacher training in the targeted circuits to be provided by selected accredited institutions; (ii) enrollment of teachers in graduate degrees in selected programs (priority subjects for the upper secondary level would include mathematics, physics and biology), special education studies, and bilingual and intercultural education; (iii) enrollment of principals and school management staff in graduate programs in school management to be provided by selected accredited institutions.

Sub-Component 1.3. Academic Management System at School Level - Online Education Community. This sub-component would finance the implementation of online education in all schools in the targeted circuits, including the provision of computers, internet connectivity, and training of public school teachers.

Sub-Component 1.4. Services for Students with disabilities and Special Education. The sub-component would finance: (i) the provision of technical, didactic, and disability-specific materials to educational facilities; (ii) teacher training in areas focusing on educational needs that arise in the course of a student´s individual development; and (iii) implementation of campaigns to raise awareness of the community to promote the enrollment of children with disabilities.

Component II. Strengthening Planning, Management and Evaluation Capacity at MINEDUC (Total: US$4.1 million; World Bank: US$3.5 million; Actual: US$6.7 million). The component aimed at strengthening MINEDUC's planning, management and evaluation capacity, including: (i) the development of modules for the management information system: (ii) the enhancement of management capacities of the Millennium Schools Management Unit and Work Contracting Service (SECOB); and (iii) carrying out of two impact evaluations on program outcomes.

Sub-Component 2.1. Management and Information Systems. This sub-component would partially support the completion and implementation of a fully integrated Education Management Information System (EMIS). Specifically, it would finance the development and implementation of four modules: (i) institutional school management; (ii) school supply management; (iii) project management; and (iv) business intelligence.

Sub-component 2.2. Management, Monitoring and Specific Studies / Impact Evaluation. This sub-component would finance: (i) the technical and administrative management of the project, including the hiring of specialists in financial management, procurement, monitoring and evaluation, social management and other technical temporary staff needed during Project implementation; (ii) carrying out of project external audits and Transportation Reviews; (iii) financing operating costs related to project activities; and (iv) carrying out of two specific studies: a quasi-experimental evaluation of the impact of the in-service training program for teachers on student learning; and the development of an analytical model to measure the direct and indirect effects of the consolidation of schools on education outcomes (dropout, retention, and graduation; quality/learning assessments; equity; and efficiency gains on allocation of resources) and potential spillover effects on neighboring schools. Both studies would be led by the National Institute for Educational Assessment (INEVAL) in coordination with MINEDUC.

Scope of targeted circuits in the context of parallel involvement of other development agencies: The project was in line with the ongoing national reform efforts for consolidation and integration that were financed in high poverty education circuits through several other complementary sources, including the Inter-American Development Bank and the Andean Development Bank. The World Bank-supported project selected 23 targeted education circuits out of a country-wide total of 1,134 education circuits, belonging to nine school districts (ICR, p. 9). Education circuits were selected based on a combination of criteria that would enable piloting and evaluation in different contexts (ICR, p. 23). Circuits were territorial administrative units that underwent frequent changes, both in their boundaries and in the number of schools within them, while parishes constituted the next largest and established territorial disaggregation or administrative units in the country (over 1,500 parishes country-wide).

The project planned to finance interventions in circuits with different levels of poverty with the expectation of reducing inequalities. Of these, all except one circuit had higher levels of poverty than the national average of 60 percent. The poverty headcount in project areas ranged from 70 to 90 percent in seven districts and above 90 percent in four districts. The targeted circuits reflected a variety of contexts, including urban and rural environments and different indigenous populations. The selection also considered those circuits that faced high imbalances between demand and adequacy of supply in education services.

Revised Components

First restructuring (December 17, 2019): The rationale for changes of the first restructuring was to respond to the Client requests to:

i. Cancel loan funds due to significant fiscal constraints and to reduce debt levels in the context of the Extended Fund Facility program of the International Monetary Fund (IMF).
ii. Directly oversee infrastructure works, notably rehabilitation, to expedite implementation since SECOB was going through a restructuring process and faced capacity constraints.
iii. Shift more attention towards teacher development, provision of technical assistance (TA) to schools with underperforming students and teachers, and the use of computer-assisted learning to support students with acute learning gaps.
iv. Have access to TA for a set of schools in marginalized locations with low performance in standardized tests that required the application of student evaluations by INEVAL.
v. Adjust the focus of teacher training from targeted circuits to one that targeted teachers that displayed the most acute cognitive gaps based on the results of the Ser Maestro assessment, a standardized test applied to all teachers in service, capable to identify the cognitive gaps that teachers display in topics they taught.
vi. The use of parish, rather than circuit, would allow a more established and time-invariant definition of the geographic unit used for targeting and monitoring purposes.
vii. Revise the results framework to adjust issues identified in the definitions, methodology for calculation, and calibration of indicators.

The first restructuring changed the name of Component 1 from “Improving school services in targeted circuits” to “Improving school services in targeted parishes,” in line with the revised methodology for the targeting unit. It also adjusted the budget allocation across categories of eligible expenditures to reflect several modifications among project components and subcomponents, as follows:

i. Component 1, Subcomponent 1.1: The number of schools to be constructed and renovated was reduced from 31 to 17 schools.
ii. Component 1, Subcomponent 1.2: MINEDUC would prioritize in-service teacher training for teachers from multi-level schools (generally small, rural schools in disadvantaged areas) and teachers from technical upper secondary education schools, both nationally as opposed to geographically within Parishes, and evaluate these training programs.
iii. Component 2, Subcomponent 2.1: The EMIS to be developed would be more comprehensive and ambitious.
iv. Component 2, Subcomponent 2.2: In addition to the evaluations included in the Project’s original design, financing would be provided for data collection and evaluations of: (i) effect of in-service

teacher training on teachers; (ii) effects of school hubs on student outcomes; and (iii) implementation of the Academic Management System at the school level. MINEDUC would also conduct evaluations of the following interventions: (i) use of an adaptive computer-assisted learning program (pilot in at least 100 schools); and (ii) technical assistance for the development of school-based development plans (pilot in at least 70 schools).

The first restructuring also: (i) cancelled US$40 million from the loan amount; (ii) modified the institutional arrangements to reflect that MINEDUC would become the implementing agency for the remaining school renovations/rehabilitations under Subcomponent 1.1, and that INEVAL would become the co-executor for selected activities under Subcomponent 2.2; (iii) introduced a new disbursement category associated with INEVAL expenditures; (iv) adjusted disbursement arrangements and estimates; (v) increased the project's overall risk rating; and (vi) amended legal covenants.

Second restructuring (March 19, 2020) did not involve component revisions and was related to challenging macro-economic aspects. In an effort to optimize the use of financial resources and avoid implementation delays in development projects due to the lack of liquidity, the Government of Ecuador requested the amendment of their full portfolio of Loan Agreements to allow the financing of Value Added Tax (VAT) with loan proceeds (Restructuring Paper, March 19, 2020, p. 4).

Third restructuring (August 31, 2020): Its rationale was to reflect the government request to:

i. Cancel loan funds due to fiscal constraints and the need to reduce debt levels in the context of the IMF Article IV program.
ii. Adjust the project to provide support to address the COVID-19 pandemic impact by including response activities.
iii. Reflect an Executive Decree that transferred the functions and competencies of SECOB to MINEDUC.
iv. Adjust the implementation schedule and targets to reflect implementation delays caused by the COVID-19 pandemic

The restructuring reduced the scope of infrastructure under Subcomponent 1.1 from 17 to 15 schools, with the following disaggregation: (i) six new schools (of which four had been completed at the time of restructuring); and (ii) nine school rehabilitations. It also increased the allocation (from US$0.6 to US$1.6 million) of Subcomponent 1.4 to fund the purchase of equipment, development, and broadcasting of educational content for television and radio, and to fund two new consultancies to: (i) develop quality standards for the delivery of special education, and (ii) redesign the offer of available technical secondary education. US$1.0 million was reallocated to Subcomponent 2.1 to finance activities related to the COVID-19 emergency response. To cover related expenditures, the school supply module of EMIS was to be developed in-house (as opposed to Project-financed) and US$0.52 million was reassigned from Subcomponent 2.2 resources originally allocated to conduct the (i) baseline for the impact evaluation of teacher training; (ii) qualitative evaluation of training provided to technological Baccalaureate teachers; and (iii) evaluation of online education. The restructuring also changed the name of Subcomponent 1.4 from "Services for students with disabilities and special education" to "Strengthening government capacity to provide more inclusive education contents".

The third restructuring also: (i) cancelled US$12.7 million from the loan amount; (ii) modified the institutional arrangements to reflect that the Ministry of Transportation and Civil Works would become the implementing agency for school renovations/rehabilitations; (iii) reallocated resources across components and disbursement categories; (iv) adjusted the implementation schedule and extended the closing date by one year to December 31, 2021; (v) updated disbursement estimates in line with the revised implementation schedule; and (vi) amended legal covenants to reflect agreed changes.

Fourth restructuring (December 2, 2021): The rationale for changes was to reflect the government request to:

i. Respond to some of the challenges posed by school reopening in the context of COVID-19 by rehabilitating schools that had been closed. Only this fourth restructuring had some implications on the TOC by adding a new activity (the reopening of schools).
ii. Provide additional time to complete activities and cancel others that were not expected to be completed within the planned timeframe.

The restructuring adjusted the project to finance, under Subcomponent 2.1, the rehabilitation of 36 schools that had been long closed with funds that were previously allocated to the following activities that were dropped: (i) school improvement plans, an evaluation of the school improvement plans, an evaluation of a graduate level training and some INEVAL assessments; (ii) two of the original infrastructure rehabilitations for which the bidding processes had failed; and (iii) some of the activities to develop the EMIS (institutional school management, supply management, project management and students' academic performance). Resources originally allocated for teacher training activities (US$2.3 million) were reallocated to equipment and furniture for these 36 schools, and the production of episodes for radio and television was canceled and resources allocated to a new "First Public School in Distance Modality."

The fourth restructuring also: (i) reallocated resources across components and disbursement categories; (ii) adjusted the implementation schedule and extended the Closing Date by another year to December 31, 2022; and (iii) updated disbursement estimates in line with the revised implementation schedule.

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

Cost and financing: At appraisal, the total cost of the project was estimated at US$201 million consisting of an IBRD loan of US$178 million and a planned Borrower contribution of US$23 million. The loan instrument was an Investment Project Financing. Two partial loan cancellations aggregating at US$52.7 million were associated with the IMF debt reduction program. The actual cost of Bank financing was US$116 million.

Dates: The project was approved on October 14, 2014 and became effective on February 9, 2016. The project underwent four restructurings, including project extensions aggregating at two years. The project closed on December 31, 2022.

Restructurings: Project restructurings were discussed in section 2d in the context of component revisions.

3. Relevance of Objectives

Rationale

During the decade prior to appraisal, Ecuador witnessed substantial improvements in education that were facilitated by increased budgetary allocations. Improvements were made in both coverage and learning outcomes. Gender parity in enrollment in early education was achieved. The government launched several reforms aimed at addressing quality issues. These included the Reorganization Model for the Supply of Education, also known as the “Millennium School Initiative” that was launched in 2012 aiming to absorb or consolidate existing institutions from preschool to upper secondary into “hub” schools. These “integrated schools” were expected to improve the quality of educational opportunities along with more efficient allocation of physical and human resources. The government planned to reduce the number of 18,400 institutions to about 5,000 “hubs” or “integrated schools,” including the development of new “hubs,” expansions, and renovations. The government introduced new criteria for the selection, promotion and training of teachers and school authorities, along with a comprehensive new strategy for school principals and authorities that aimed at strengthening managerial skills for handling the larger school hubs. The government introduced a conditional cash transfer program to families in the poorest quintile, national radio and television communication campaigns to emphasize the value of education, and developed the “Online Learning Community”, a school-level portal where education management was streamlined through the access and use of system-wide services available to all educational community members.

At the same time, significant challenges remained in terms of enrollment, equity and quality. These challenges included very low levels of enrollment in early childhood education with only 23 percent of children aged 3 and 4 enrolled; significant dropout rates, starting from the 8th grade of basic education through the end of upper secondary, and which were far from the national goal of increasing the net attendance rate for upper secondary education to 75 percent; differences in learning outcomes and school growth trajectories in Ecuador across different socioeconomic levels; significant urban-rural gaps in upper secondary education attendance; differences in education coverage for early education, lower secondary and upper secondary across geographic areas and income levels; and significant differences in learning outcomes across provinces. Both the supply side (infrastructure and teacher quality) and demand side (family resources, lack of interest often associated with the poor quality of education, and lack of information on returns to education) were factors contributing to the persistence of inequality in education outcomes. Hence, the project intended to respond to the above constraints by increasing school access with a focus on early education, and to address the quality of school services that would contribute to reducing school dropout and promoting demand.

At entry, the country and the World Bank were in an early stage of re-engagement. The FY14-FY15 Interim Strategy Note (ISN) provided an opportunity to re-initiate the dialogue with the country and to develop analytical work and lending operations in limited areas of engagement, including for the improvement of service delivery. Project objectives were in general consistency with the ISN, the subsequent FY16-FY17 Country Engagement Note, and with the systemic Country Diagnostic that highlighted the improvement of the quality of education under the pillar of expanding economic opportunities.

At project closing, objectives were consistent with Country Partnership Framework (CPF) for Ecuador for the Period FY2019-FY2023. Specifically, objectives were responsive to CPF Results Area II (Boosting Human Capital and Protecting the Vulnerable). The ICR (p. 16) noted that Objective 4 (Improve access to demand-driven technical education) highlighted the project merits as contributing to the expansion of teachers and principals training, strengthening of school management, and evaluating the impacts of education reform that focused on five main outcomes: (i) coverage/graduation; (ii) inclusion of vulnerable school-age children; (iii) quality of learning; (iv) equity implications; and (v) efficiency in the allocation of resources. In addition, objectives were consistent with the government's plan for the Creation of Opportunities (2021-2025) for promoting an inclusive education system of quality.

The project also retained its relevance to significant changes in country circumstances, notably with arising macroeconomic and fiscal challenges, and the advent of the COVID-19 pandemic. The project adjusted its operations on two occasions that resulted in partial loan cancellations to facilitate Ecuador's compliance with fiscal measures under the IMF's Extended Fund Facility, and prioritized activities that could be implemented within a reduced budget allocation. The project supported the government response to the COVID-19 impact on education and the enablement of a safe return to schools.

Notwithstanding the above alignment elements, the intended development change for increasing enrollment in early education was very marginal, and remained minimal throughout the operation's lifetime, thus raising doubts about its relevance as a potential solution to the development problem.

Rating

Substantial

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

Increase enrollment in early education in the targeted parishes

Rationale

The theory of change held that strengthening physical infrastructure through the construction of school hubs, renovation and expansion of existing schools, provision of transportations to children, and preventive and corrective maintenance would collectively contribute to increased school access and improved school environment, plausibly contributing to increased enrollment in early education in targeted parishes.

Outputs and intermediate results

The project financed the construction and equipping of four new schools, seven school rehabilitations (9 out of 11 with early childhood education), and 24 school rehabilitations for reopening school following the COVID-19 pandemic.

The proportion of students in project-supported parishes benefitting from infrastructure improvements and transportation reached 17.2 percent.

Two surveys on beneficiary communities' satisfaction with government financed school transportation were carried out, but the ICR did not offer information about the results.

Training outputs are noted under Objective 2, below.

Outcomes

The ICR reported that enrollment in early education of 4-year-old children in the targeted parishes increased from a baseline of 7,396 children in 2017 to 8,667 children in 2023, meeting both the original target of 7,710 children and the revised target of 7,474 children (ICR, p. 32). The significance of the marginal numerical increase in enrollment of 4-year-olds is unknown, as no information on proportions was offered by the ICR. There is no evidence that the share of 4-year-olds enrolled in early education increased over time. The Project Team noted in the region's communication #1 (January 19, 2024) that proportions were never meant to be part of the analysis in the ICR. However, a follow-up communication #2 from the region (March 11, 2024) explained that the share of 4-year-olds enrolled in early education was not calculated in the ICR as disaggregation levels for population statistics in Ecuador do not reach the "parish" level, as they stop at one level up, i.e., the "canton", which is a combination of parishes.

(Note: For 3-year-olds, enrollment results were taken out of the measurement of the PDO indicator and moved to an intermediate results indicator. The baseline for 3-year-olds was 5,265 children in 2017. The actual achieved was 3,667 children in 2023, exceeding the original target of 2,351 and the revised target of 2,175, while also noting that there was an overall regression at project completion in 2023 from the baseline of 5,265 children in 2017).

This ICR Review took into consideration the lack of denominators (explained above) which would have allowed the estimation of the share of 4-year-olds enrollment in early education. Therefore, the achievement of this objective is assessed as Substantial, but with a borderline achievement.

Rating
Substantial

OBJECTIVE 2
Objective
Improve the persistence rate in Lower and Upper Secondary Education in targeted parishes

Rationale
The theory of change held that, in addition to infrastructure activities and maintenance contributing to improved school environment and increased school access described under Objective 1, the provision of equipment and science laboratories, professional development of teachers, and professional development and managerial practices of school principals would contribute to increased relevance of secondary education, improved teaching practices, and improved school management, all plausibly contributing to increased persistence from lower through upper secondary education.

Outputs and intermediate results

The number of teachers who received in-service training was 23,136 teachers, exceeding the target of 2,103 teachers. The impact of in-service teacher training was not evaluated.

For teachers displaying cognitive gaps, two in-service teacher training programs were developed (Mathematics, language and soft skills), and 4,223 teachers received training against a target of 2,627 teachers.

The number of teachers who completed graduate-level studies in selected subjects was 463 teachers, achieving the target.

Students benefiting from direct interventions to enhance learning increased from a baseline of zero in 2017 to 25,387 students in 2023, exceeding both the original target of 6,783 students and the revised target of 21,624 students.

The number of public schools that offered adaptive computer-assisted learning to their students was 227 schools.

All teachers in the project-targeted parishes were provided with 6,798 ICT kits. The ICR reported that these were used regularly to communicate with students and to share materials.

The project distributed 457 kits of didactic and disability-specific materials to educational facilities and teachers were trained on their application.

The project supported students’ access to online learning and digital resources, which has likely contributed to the persistence rate, as more students could remain engaged with the education system during school closings.

The ICR did not provide information on the professional development in managerial practices for school principals, vice-principals, and inspectors.

The ICR (p. 19) reported that several activities aimed at strengthening MINEDUC’s planning, management, and evaluation capacity fell short of expectations. The business intelligence module for EMIS was completed and supported the analysis of performance indicators. Activities related to the implementation of school improvement plans and related evaluation, and the assessment of a graduate-level teacher training and standardized assessments under INEVAL were canceled due to delays in contracting and reallocations to support post-COVID-19 school reopening.

Outcomes

The persistence rate from lower secondary through upper secondary education increased from a baseline of 75.7 percent in 2015 to 85.2 in 2023, exceeding the original target of 78.1 percent and the revised target of 77.3 percent. The intended outcome was measured through a persistence rate measuring students enrolled in grade 8 of lower secondary education graduating from the third grade of upper secondary education, following a cohort approach, as a measurement of survival through lower and upper secondary education. The objective was assessed as almost fully achieved, given the shortcomings reported above, information gaps, and non-completion of planned surveys and evaluations which would have permitted a more comprehensive evaluation, according to the ICR (p. 27).

Rating
Substantial

OVERALL EFFICACY

Rationale
The objective to increase enrollment in Early Education was rated Substantial with a marginal achievement. The objective to improve the persistence rate in Lower Secondary Education and Upper Secondary Education in targeted parishes was almost fully achieved and rated Substantial. The aggregation of achievements is consistent with a Substantial rating for overall efficacy.

Overall Efficacy Rating

Substantial

5. Efficiency

The economic and financial analysis at appraisal (PAD, pp. 52-62) used a conventional cost-benefit analysis measuring the benefits of the program as the additional earnings of graduates from secondary education alongside the additional costs. The analysis was based on data from the Master Archive of Educational Institutions and graduation projections. It took into account income premiums of completing lower and upper secondary schooling, based on official data regarding average salaries by level of education. The analysis estimated that 11,600 students in lower secondary and 8,400 upper secondary students who would have dropped out of school in the targeted circuits would remain in school over the next 10 years. Using a discount rate of 5 percent, the cost-benefit analysis estimated a Net Present Value at US$268.5 million with an Internal Rate of Return of 11.2 percent.

In addition, the economic analysis suggested that the “Hub” consolidation approach would result in savings and efficiency gains in resource utilization due to the consolidation of smaller schools that serve fewer students and that register low levels of internal and external efficiency. The analysis also estimated that the consolidation of laboratory infrastructure and equipment required only 121 laboratories instead of 179 laboratories without the project, for the same coverage.

The ICR’s economic analysis (pp. 44-45) also considered that the main benefits would derive from an increase in the number of years of education. It assumed that the infrastructure would lead to an increase of 0.12 years of education. Since the income premium for an additional year of education in Ecuador was estimated at 6.5 percent, the wage increase due to the improved infrastructure was equal to 0.78 percent. The analysis reasonably assumed that every child would start to work at the age of 20, continue to work, and would retire at the age of 65. The reference average yearly labor income was equal to US$6,816. It was adjusted to inflation and a discount rate of 5 percent was applied. The ex-post analysis yielded an estimated Internal Rate of Return of 9.72 percent. The ICR reported that other investments were likely to have enhanced overall benefits and the efficiency of the project, including quality improvement aspects, but their contribution was difficult to quantify.

At the same time, there were considerable negative aspects of implementation that significantly reduced overall efficiency, and led the ICR to conclude that project implementation was not efficient (ICR, p. 20). Project activities were hampered by the challenges described in section 2d and suffered significant delays during three administrative changes associated with shifting priorities, complex processes in allocating annual budgets for the project, failed migration of contracted infrastructure works from SECOB to MINEDUC, and frequent staff changes. In addition, the Loan had two partial cancellations aggregating at US$52.7 million due to serious constraints imposed by Ecuador's macroeconomic stabilization program. In spite of two extensions of the closing date that would allow the completion of activities, an amount of US$14.9 million remained undisbursed at closing.

Efficiency Rating

Modest

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	✓	11.20	100.00 ☐ Not Applicable
ICR Estimate	✓	9.70	100.00 ☐ Not Applicable

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

6. Outcome

The objective to increase enrollment in Early Education was rated Substantial with a marginal achievement. The objective to improve the persistence rate in Lower Secondary Education and Upper Secondary Education in targeted parishes was almost fully achieved and rated Substantial. The aggregation of achievements is consistent with a Substantial rating for overall efficacy

a. Outcome Rating

Moderately Satisfactory

7. Risk to Development Outcome

The main risk that development outcomes may not be maintained relates to macroeconomic prospects, given that Ecuador remains highly dependent on oil revenues, and fluctuations in oil prices may continue to impact fiscal sustainability. Ecuador also continues to face challenges in improving the capacity of the public education system at subnational levels and in addressing regional disparities.

However, the project directions remain in congruence with the government development plan for creating opportunities (2021-2025) that prioritizes the objective to “develop the capacity of citizens and promote innovative, inclusive, and quality education at all levels”. It is unlikely that an eventual change in administration would not prioritize such an objective. The risk related to the lack of maintenance of the schools is mitigated by the implementation of a maintenance plan that MINEDUC has in place. Also, the risk arising from the impact of potential natural disasters on infrastructure is at least partly mitigated by anti-seismic measures that were included in the construction guidelines. Importantly, the World Bank and the government are collaborating in preparing a follow-on operation (ICR, p. 30) that would facilitate the continuity of activities and sustaining some of the achieved outcomes, such as in the improved persistence rate in secondary education in targeted parishes.

8. Assessment of Bank Performance

a. Quality-at-Entry

Project preparation proceeded under difficult circumstances, as the World Bank was reengaging in development lending to Ecuador after a long hiatus, and government counterparts had limited familiarity or experience in working with the Bank in development operations. The ICR (p. 29) reported that, in retrospect, the overall risks were underestimated, including political risks, macroeconomic risks, and institutional capacity risks, also encompassing fiduciary and safeguard risks. While it would have been difficult to mitigate these risks entirely, such risks should have suggested caution in designing the project that was characterized by the ICR as ‘over-dimensioned’. In the context of the recent reengagement at the time of preparation, there was limited knowledge of the country’s institutional environment (e.g., circuits and parishes) and responsibilities and capacities (e.g., INEVAL), and which subsequently necessitated revisions in implementation arrangements.

With no previous local lessons or insights that could facilitate the preparation process, the project built on the existing government strategy for education reform and consolidation that constituted a flagship policy owned by the government. The preparation team held extensive consultations with community leaders, students, and parents in targeted areas, including indigenous communities, to inform preparation and to help mitigate potential opposition of families to school consolidation.

The design considered recent track record of domestic interventions, under which a total of 53 “hub” schools have already been built and functioning. The teacher development framework was in place, and some teachers had received in-service training. INEVAL Institute had successfully carried out standardized assessments of student learning outcomes and teacher quality. Parallelly, preparation was informed by international experience and best practices for improving learning outcomes, including for improving infrastructure aspects, textbooks, pedagogical material, pre-service and in-service teacher training that would contribute to better teaching and better teaching career paths.

MINEDUC would be responsible for project implementation, and the Millennium Schools Management Unit would be responsible for fiduciary management, except for construction under Subcomponent 1.1, whose execution and fiduciary management would be delegated to SECOB under a subsidiary agreement establishing its responsibilities for civil works and their supervision. The Millennium Schools Management Unit would be supported by designated staff for financial management, procurement, and M&E. It would coordinate activities with the technical units in each of MINEDUC's administrative zones covered by the project and which would have supervision responsibilities in their respective zones (ICR, p. 23). The coordinator for M&E was assigned to be the interlocutor with the World Bank.

Preparation included adequate arrangements for safeguard policies (see section 10a), including the preparation of an Environmental and Social Management Framework (ESMF) and an Indigenous Peoples Planning Framework. There were M&E design shortcomings (see section 9a).

Quality-at-Entry Rating
Moderately Satisfactory

b. Quality of supervision

The Bank supervision and implementation support team navigated through a challenging environment to fulfill their role. A major economic crisis precipitated by the fall in oil prices and the global COVID-19 pandemic impacted both project implementation and beneficiaries. The macroeconomic situation resulted in strict expenditure control measures during the early phase of the project. There were two major changes in administration associated with Presidential and Parliamentary elections in 2017 and 2021, with consequent impacts on implementation priorities and approaches, institutional changes, and turnover in ministerial and project staffing. Senior-level staff and counterpart rotation affected investment decisions, and implementation. Circuits were territorial administrative units (circuits), whose boundaries were modified year after year at the discretion of the Minister of Education, challenging the project in dealing with stable baselines, targets, and indicators.

The Bank Team was proactive in identifying and resolving threats to the achievement of development outcomes and the Bank's fiduciary role through intensive implementation support and by facilitating four successive project restructurings that were needed to right-size and adjust the project to the country's evolving realities, while seeking to maintain coherence in project activities and the pursuit of intended outcomes. The Team facilitated partial funding cancellations that were responsive to the government needs in meeting IMF's provisions for debt reduction. Monitoring of fiduciary aspects and compliance with safeguards was satisfactory. Three Task Team Leaders were involved in leading supervision and implementation support during the implementation period. The Team undertook 13 formal supervision missions followed by quality reporting. The Team was also responsive to emerging country needs at the advent of the COVID-19 pandemic and facilitated the design and financing that supported the related response to the pandemic's impact.

Quality of Supervision Rating
Satisfactory

Overall Bank Performance Rating
Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

Objectives were clearly stated and reflected by outcome indicators, with a concise results framework that had 11 intermediate results measuring outputs along the results chain. Indicators had baselines and targets, and clear guidance on measurement methodology, data sources, frequency, and responsibility for collection (ICR, p. 26). Nevertheless, there were several issues with the definition of indicators, their respective baselines, availability of enrollment percentages, and ability to monitor indicators. The results chain and framework could have been more developed to provide additional evidence. At a minimum, the number of new ECE classrooms and the new capacity created with enrollment numbers could have been provided. Appraisal noted special attention for disability and indigenous groups, and disaggregated data would have shown the extent to which interventions were benefitting these groups. There was insufficient information on transportation barriers.

The Millennium Schools Management Unit was responsible for collecting and compiling data on all indicators and for sharing Biannual Progress Reports with World Bank. The unit was also expected to continue working closely with the National Coordination of Planning Body through the National Directorate of Analysis of Education Information that would provide administrative data.

b. M&E Implementation

Throughout implementation, the project submitted regular semi-annual reports to monitor and assess progress (ICR, p. 27). However, the ICR reported that, during early implementation, it became clear that it was difficult to monitor progress for many indicators in the results framework. The first project restructuring introduced important changes in the results framework to address issues in the definition, methodology for calculation, and data provided to calibrate most indicators. There were several subsequent adjustments to the results framework, including introduction and elimination of indicators, adjustment of baselines and targets, and changing measurement metrics that made monitoring challenging.

Difficulties were notably encountered after the change from targeted circuits to parishes (affecting the calculation of indicators, baselines and targets), the COVID-19 pandemic, and partial loan cancellations.

Reference to the percentage of girls in indicators were dropped, as Ecuador had already achieved gender parity in enrollment rates.

The ICR reported that many planned studies were not completed, including the quasi-experimental evaluation of the impact of the in-service training program for teachers on student learning, and the development of an analytical model to measure the direct and indirect effects of consolidation of schools on education outcomes and spillover effects on neighboring schools.

c. M&E Utilization

Monitoring data and findings were used for regular project monitoring. The ICR noted that M&E findings were used for recalibrating the scale and scope of the project through its successive restructurings, and in guiding project adaptation to fiscal constraints. M&E data were also used for prioritizing school selection for rehabilitation in response to the COVID-19 pandemic.

Since the ICR lacked additional evidence, the validation of the enrollment objective has been challenging to assess the magnitude of new ECE enrollment. In addition to the shortcomings noted in a and b, and as noted in section 4, the ICR (p. 27) reported that the surveys and evaluations, which were not carried out, would have permitted a more comprehensive evaluation. Overall M&E quality is rated as Modest.

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

The project was classified under Environmental Category B and it triggered the following safeguard policies:

i. Environmental Assessment (OP/BP 4.01) in view of civil works related to the construction of new schools and renovation of existing ones.
ii. Indigenous Peoples (OP/BP 4.10) in view of the presence of indigenous communities among project beneficiaries in both rural and urban areas, raising risks related to social and cultural impacts, including concerns about sending children to schools outside of their communities and the availability of safe and reliable transport.
iii. Physical Cultural Resources (OP/BP 4.11) since civil works at some schools may require minor excavations in Andean areas of the Bolivar Province where chance finds could occur.
iv. Involuntary Resettlement (OP/BP 4.12) since land acquisition could potentially be necessary for the development of some hub schools.

SECOB was responsible for environmental safeguards, and MINEDUC was responsible for compliance with social safeguards. According to the ICR (p. 28), the government prepared an Environmental and Social Management Framework (ESMF) and an Indigenous Peoples Planning Framework (IPPF) documenting project risks, impacts, opportunities, and procedures to be followed for social assessment, consultation, and development of social management plans. A Resettlement Policy Framework was also prepared in the event that land acquisition became necessary. The ESMF provided procedures to be followed for environmental impact assessment once the exact location of schools was identified, including institutional arrangements for supervision. Although land acquisition was expected to be minimal, a Resettlement Policy Framework was prepared in the event that land acquisition became necessary. All safeguard arrangements were disclosed. MINEDUC established, operationalized, and disseminated the Project's Grievance Redress Mechanism, with three publicly accessible channels for filing complaints and suggestions: online; by phone; and by email. No complaints were filed.

Throughout implementation, compliance was adequate and no issues were reported. Safeguard ratings were satisfactory (ICR, p. 28), as also recorded in the Operations Portal.

b. Fiduciary Compliance

Financial management performance was rated moderately satisfactory during implementation. Moderate shortcomings in financial management were identified, largely in timeliness, but they did not prevent the provision of reliable information required to manage and monitor project implementation, including contracting of auditors and delivery of audit reports. No audit qualifications were reported by the ICR. The assignment of INEVAL as co-executor of management and monitoring activities generated complexities, including budget allocation processes and difficulties in consolidating financial information in a timely manner. These were addressed by the introduction of mitigation measures that specified responsibilities, updated the operations manual, and assigned a team for close monitoring.

Procurement performance during project implementation was mostly rated satisfactory. Given that MINEDUC had no recent experience in procurement under World Bank-financed projects, the World Bank provided consistent hands-on training on procurement procedures. There were delays in launching procurement processes for civil works contracting, and the project introduced mitigating measures by hiring staff with knowledge of World Bank procurement guidelines, staff training, and conducting procurement supervision missions.

c. Unintended impacts (Positive or Negative)

None reported.

d. Other

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11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	
Quality of M&E	Modest	Modest	
Quality of ICR	---	Substantial	

12. Lessons

The ICR (pp. 30-31) offered several lessons and recommendations, and the following lessons were re-stated by this ICR Review:

Working closely with project implementing agencies to ensure understanding of the World Bank's policies and procedures facilitates the World Bank re-engagement with the country in development lending. The project was one of the first operations approved when the World Bank began reengaging with Ecuador after a lending hiatus. Although the preparation team considered lessons from similar projects in other countries, it had limited country experience, and the Client also had limited familiarity with World Bank policies and procedures. Hence, the project required adjustments and close implementation support to pursue its objectives.

A thorough identification and anticipation of macroeconomic and political risks at the preparation stage can help in ensuring a simple project design. Ecuador's economy is highly dependent on oil revenues. At the time the loan was approved, oil prices started plummeting, going from US$106 per barrel in July 2014 to US$30 per barrel in January 2016, and the GDP stagnated. This led to partial loan cancellations to assist the country's stabilization efforts. Also, the project was prepared at a time when Ecuador had witnessed relative continuity in policy priorities and staffing under the previous administration that lasted 10 years. Elections were scheduled for 2017, and changes were likely. While little could be done to mitigate these risks that are beyond the control of the project, they should have suggested greater caution and simplicity in the initial project design.

Market research that identifies the best approach for managing civil works and the use of unit prices instead of lump sums can facilitate the implementation of projects with a large number of contracts related to infrastructure rehabilitation. In the specific context of this operation, helping the implementing agency to manage infrastructure rehabilitation instead of hiring a third party was found to be an effective option. 'Hands-On Expanded Implementation Support' was provided to the implementing agency to speed up the launch and award of procurement processes. The project significantly improved civil works execution once MINEDUC became the only executing agency for infrastructure development.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR was well organized and results-oriented. It was candid and internally consistent. The results chain was not sufficiently developed. The quality of available evidence and ICR analysis was mixed. The ICR linked its narrative to the evidence. The ICR derived lessons anchored in project experience. The ICR’s reporting on successive restructurings was thorough, but the application of a split rating was moot, as the ratings for applicable revisions were similar, and the split included two phases during which there were zero disbursement weights, hence, they caried no consequence. The ICR had lapses in clarity, incomplete information on core project outputs and shifting target population, and the ICR was moderately lengthy. The overall quality of the ICR is rated substantial at a marginal level.

a. **Quality of ICR Rating**
Substantial