Public Disclosure Authorized

Report Number: ICRR0023814

1. Project Data

Project ID P161029	Project ACE			
Country Nicaragua	Practic Education			
L/C/TF Number(s) IDA-60150,TF-B5528	Closing Date (Original) 29-Apr-2022		Total Project Cost (USD) 61,914,186.42	
Bank Approval Date 13-Apr-2017	Closing Date (Actual) 30-Apr-2023			
	IBRD/II	DA (USD)	Grants (USD)	
Original Commitment	55,0	7,175,000.00		
Revised Commitment	61,9	7,123,252.36		
	61,914,186.42		7,123,252.36	
Actual	01,8	114, 100.42	, , , , , , ,	
Actual	01,8	714, 100.42	, , , , , , , , , , , , , , , , , , , ,	

2. Project Objectives and Components

a. Objectives

According to the Financing Agreement (page 5) and the Project Appraisal Document (PAD, page 13), the project objectives were as follows:

- To improve teacher practices for participating teachers in preschool, primary and secondary education nationwide; and
- To improve physical learning conditions in targeted schools.

The project development outcome (PDO) indicators were not revised, although there were minor modifications in the description of the indicators' measurements, and the target of one PDO indicator was increased (see Section 4 for details).

- b. Were the project objectives/key associated outcome targets revised during implementation? No
- c. Will a split evaluation be undertaken?
- d. Components

Component 1. Improving Teacher Practices for Participating Teachers in Preschool, Primary and Secondary Education Nationwide (appraisal: US\$24 million; actual: US\$22.9 million): to finance the revision and implementation of in-service teacher training plans for approximately 42,500 public teachers; to design and pilot a new national Teacher Mentoring Program (TMP), to provide learning materials for classroom use, and to strengthen the capacity of the Ministry of Education (MINED) to collect and analyze student assessments, and lead studies on teacher practices.

Component 2. Improving the Physical Learning Conditions in Targeted Schools (appraisal: US\$27.2 million; actual: US\$35.3 million): to ensure that schools meet the minimal physical quality standards by supporting the rehabilitation, replacement, and/or expansion of school infrastructure, including furniture and educational equipment, to improve physical learning conditions in targeted multi-level (pre-primary, primary and secondary) schools.

Component 3. Supporting Project Management and Monitoring (appraisal: US\$3.8 million; actual: US\$3.1 million): to strengthen the technical and fiduciary capacity of MINED by supporting the fiduciary management system for overall project implementation, and the development of an infrastructure management system to monitor the implementation of activities under Component 2.

Contingent Emergency Response Component (CERC) (no amount allocated nor disbursed): introduced at the first project restructuring to allow Nicaragua to respond in the event of an eligible emergency, in line with the strategic approach taken across the World Bank's portfolio in the country.

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

Project cost. At appraisal in April 2017, the total project costs were estimated at US\$ 55 million. In April 2021, an Additional Financing (AF) was processed to include a grant from the Global Partnership for Education (GPE), and the estimated costs were revised to US\$ 62.175 million. The actual disbursements at project closing were US\$ 61.914 million.

<u>Financing</u>: The project was financed by a US\$ 55 million IDA credit, of which US\$ 54.791 million was disbursed. The GPE's Education Sector Plan Implementation Grant (ESPIG) contributed US\$ 7.123 million of a planned US\$ 7.125 million.

Borrower Contribution: There was no planned Borrower contribution.

<u>Dates</u>: The project was approved on April 13, 2017, and became effective on July 17, 2017. Its mid-term review was held on August 9, 2019. The project closed on April 30, 2023, one year after its originally scheduled closing date of April 29, 2022. It underwent two restructurings:

- April 10, 2021: to process the AF from the GPE, extend the closing date by eight months, and revise the Results Framework by making minor modifications in the description of PDO indicators and increasing the target of one PDO indicator.
- December 22, 2022: to extend the closing date by four months and adjust downwards the targets for two Intermediate Results Indicators.

3. Relevance of Objectives

Rationale

At appraisal in 2017, Nicaragua had achieved almost universal coverage in primary education, and significant progress in secondary school enrollment. Nevertheless, the basic education system faced challenges such as high repetition, dropout, overage rates (the highest in the LAC region), and low learning outcomes. Poor performance of Nicaraguan students in international learning assessments was linked to the quality of the learning environment, as well as teachers' knowledge and instructional skills. A large share of teachers (e.g., 70 percent of preschool community teachers and 20 percent of secondary education teachers) lacked initial training, a prerequisite for formal certification.

Poor school infrastructure limited the availability of adequate physical learning conditions, especially in rural areas. It resulted in using small, multi-grade schools, often with a single classroom and a single teacher to cover students in all six primary grades. At the secondary level, access was limited by the fact that many students had to enroll in far-off secondary schools to continue their studies. Nicaragua also had one of the lowest availabilities of school water and sanitation facilities in LAC; access to these was positively correlated to better learning outcomes, especially for girls. Finally, school infrastructure was vulnerable to major natural disasters, further exacerbating access to and safety of schools.

This project's focus on improving teaching practices and school infrastructure complemented previous Bank projects that sought to improve access, increase students' retention and completion rates, and strengthen MINED's institutional capacity (P126357, FY12-19 and P133557, FY13-18). The objectives were highly relevant and aligned with the country's 2017-2021 National Education Sector Plan and the Country Partnership Framework (CPF) agreed with Nicaragua for FY2018-2022. By targeting areas where at least 50 percent of the population lived in poverty, thus benefitting primarily low-income students, the project contributed directly to CPF's strategic Pillar I (*Investing in Human Capital, in Particular for Vulnerable Groups*). Moreover, by improving the physical conditions in targeted schools to reduce their vulnerability to natural disasters, the project also contributed to CPF's Pillar III (*Improving Institutions for Resilience and Sustainability*).

The Project and its objectives remained relevant amidst changing circumstances during implementation due to the COVID-19 pandemic. While the PDO remained unchanged, reallocations and additional activities

were introduced under the first restructuring, which aimed to improve access to water and sanitation in selected schools. Activities to reduce learning losses in Nicaragua during the pandemic were the focus of a separate project (P174677, FY21-23).

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To improve teacher practices for participating teachers in preschool, primary, and secondary education nationwide.

Rationale

The theory of change for this objective was clear. The project envisaged to (i) revise and implement an inservice Teacher Training Program (TMP) for pre-primary and primary school teachers and adapt it to school principals, (ii) design and implement a new national Teacher Mentoring Program (TMP) for basic education teachers, (iii) provide learning materials and train teachers in their use, and (iv) strengthen MINED's capacity to conduct learning assessments and studies on teacher practices. These activities were likely to lead to the intended outcome of improving teacher practices nationwide.

Outputs:

- In-service Teacher Training Program (TTP) for pre-primary and primary teachers, revised and implemented, and adjusted to school principals. At the pre-primary level, 9,498 teachers received the TMP certification (98 percent female), exceeding the revised target of 6,508 teachers (the original target of 5,500 teachers was increased with the scale-up of this activity with the AF). At the primary level, 23,936 teachers received the TMP certification, exceeding the target of 22,300 teachers. 1,627 school principals received the adjusted training (60 percent female), exceeding the target of 1,365 school principals (target of 40 percent female).
- National Teacher Mentoring Program (TMP) for basic education teachers designed and implemented. 88.5 percent of in-service basic education teachers were trained in two TMP modules, exceeding the target of 80 percent. 565 education personnel were trained in teacher mentoring, exceeding the target of 500 individuals. 3,997 teachers received at least three mentoring visits during the project (11 percent belonging to Indigenous and Afro-descendant groups), exceeding the target of 3,750 teachers (target 5 percent belonging to Indigenous and Afro-descendant groups). 3,699 of the mentored teachers provided qualitative feedback on the quality of classroom observation/mentoring during the mentoring sessions, exceeding the target of 625 teachers providing feedback.
- Learning materials provided to preschool, primary and secondary schools and teachers trained in their use. 31,483 teachers received workbooks, planning charts, and fungible materials, exceeding the target of 20,000. 32,483 teachers received textbooks, teacher's guides, equipment, and other educational supplies, exceeding the target of 30,000.

• Learning assessment results were analyzed and disseminated nationwide (the 2019 *Cuarto Estudio Regional Comparativo y Explicativo*, ERCE, and a National Early Childhood Development Assessment). Studies were carried out to assess the effectiveness of TTP and TMP.

Outcomes:

- 98.7% of preschool teachers have desired teaching practices, exceeding the revised target of 65%. The
 original target was 30%, but it was revised once the baseline measure of 54% in 2019 became available.
 Teaching practices in preschool were captured by a score based on the classroom observation tool in the
 country's preschool assessment system (SEIDI), administered to a nationally representative sample of
 preschools.
- 3,141 primary and secondary education teachers participating in mentoring were assessed as possessing improved teaching practices, exceeding the target (2,735 teachers). Teaching practices were measured by an index score from data collected through a classroom observation instrument, with participating teachers observed three times during the academic year. The target considered the plan to mentor and observe 3,750 teachers during the project (actual 3,997 teachers). It did not differentiate the magnitude of the improvement (e.g., any increase in the teaching practice index score between the first and last measure equally counted as an improvement). When considering the percentages of mentored and observed teachers with improved teaching practices, achievement was 79% (3,141 of 3,997 teachers) versus a target of 73% (2,735 of 3,750 teachers). Two sub-PDO indicators tracked the breakdown for primary and secondary level teachers with improved teaching practices: the target of 2,144 primary level teachers with improved practices was not met (actual 2,116 teachers), while the target of 391 secondary level teachers with improved practices was exceeded (actual 1,025 teachers). According to the ICR (p. 17), this happened because when planning the mentoring program, MINED reassessed the scope and priorities to expand the number of participating secondary-level teachers to the detriment of primary-level teachers.

Disbursements of US\$7 million of IDA financing were linked to achieving eight specific targets in activities related to this objective, all of which were achieved.

Rating Substantial

OBJECTIVE 2

Objective

To improve physical learning conditions in targeted schools.

Rationale

At approval, the project envisioned as activities the rehabilitation, replacement, and/or expansion of school infrastructure to improve physical learning conditions in targeted multi-level (preprimary, primary and secondary) schools. The AF expanded the scope to improve access to water and sanitation in selected schools. Construction would be carried out considering requirements to reduce vulnerability to natural disasters and be inclusive of people with disabilities. This would plausibly contribute to an increased number of schools meeting minimum physical quality standards.

Outputs:

- The norms and standards documents for the planning, design, and maintenance of school infrastructure were updated and disseminated. It included a gender approach and a focus on adaptation to climate change and disaster risk management by financing the update and publication of: (a) Care and Maintenance Manual for School Facilities, (b) Standards and Design Criteria for School Facilities, and (c) Guide for Good Environmental and Social Practices. Additionally, MINED implemented the first phase of its School Infrastructure Planning System (Sistema de Gestión de la Infraestructura Escolar, SIGIE), meeting the revised target (the original target envisioned SIGIE's full implementation).
- 23 preschool classrooms rehabilitated and equipped, achieving the revised target of 23 classrooms but below the original target of 25 classrooms.
- 60 project-supported schools with improvement to water, sanitation, and hygiene systems to enhance learning and help tackle the challenges posed by the COVID-19 pandemic, achieving the revised target of 60 schools but below the original target of 90 schools.
- 100 percent of communications received through the Grievance Redress Mechanism (GRM) were resolved according to the agreed procedure, exceeding the target of 90 percent.

Outcomes:

• 100 percent of targeted schools meeting minimal physical quality standards, achieving the target of 100 percent. The number of targeted schools was reduced from "approximately 45 schools" at Approval to 41 in the AF Project Paper. The minimal physical quality standards included: (a) adequate classroom areas per student; (b) availability of adequate complementary service facilities such as restrooms, libraries, computers, workshops, kitchens, storage, and administrative offices; (c) connection to electricity, water, and sewage services; (d) compliance with safe school standards regarding structural resilience to climate and disaster risks; (e) availability of security fences; and (f) sufficient furniture or equipment. All the targeted schools were included in a national community-based school maintenance program, and 19 percent were located in Indigenous territories (exceeding the target of 15 percent).

The project included only this result as an outcome indicator, but it is a straightforward output.

According to the ICR, the downward revisions of the two intermediate indicator targets and the number of targeted schools were to address the higher-than-expected costs of infrastructure works (p 20). The revision of the intermediate indicator target relating to the School Infrastructure Planning System (SIGIE) was due to the lack of staff and resources at MINED to complete the implementation (p.30).

Rating Substantial

OVERALL EFFICACY

Rationale

Both objectives (to improve teacher practices for participating teachers in preschool, primary, and secondary education nationwide, and to improve physical learning conditions in targeted schools) were almost fully achieved and rated Substantial. Thus, the overall efficacy is rated Substantial.

Overall Efficacy Rating

Substantial

5. Efficiency

Design: The economic analysis prepared at appraisal and completion followed the same methodology, a Cost-Benefit Analysis, done separately for the original project and the AF. Expected benefits arise from increased learning outcomes translating into higher labor productivity, and costs reflect the actual project costs. According to the ICR, the resulting benefit-cost ratios were 12.1 for the original project and 8.2 for the AF. Using a discount rate of 8 percent resulted in estimated internal rates of return of 12 percent for the original project and 13 percent for the AF, comparable to the appraisal estimates. The ICR includes an ex-post sensitivity analysis with different scenarios of real average salaries, which still produced robust results.

Implementation: The project was implemented in less than six years, with a one-year extension of the closing date (partly due to the AF). According to the ICR (p. 29), MINED's experience with multiple World Bank-financed operations approved since 2005, and the continuity and stability of its staff had a positive impact on the project's implementation efficiency. Nevertheless, multiple factors reduced implementation efficiency, including disruptions due to the 2018 socio-political crisis and the COVID-19 pandemic, which caused cost escalations and supply chain issues that led to delays and related target reductions, and limited human resource capacities (ICR, pp.27-28). The ICR also noted that the Mid-Term Review reported setbacks in collecting reliable data on activities that had been carried out. In fact, the ICR (para.70) stated that MINED and the World Bank agreed to restructure the project to introduce adjustments that would reflect the actual pace of (slow) implementation.

The efficiency of the project was rated Substantial in view of the value for money and cost-effectiveness of interventions, but with multiple negative aspects of implementation that moderately reduced overall project efficiency. This level of efficiency is what would be expected in the operation's sector.

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:

Appraisal ✓ 12.24 □ No.	00 ot Applicable

ICR Estimate	✓	12.41	100.00 □ Not Applicable

6. Outcome

Relevance of objectives is rated High in view of full alignment with the country's context, its development plans, and the World Bank's CPF. Efficacy is rated Substantial, as development objectives were almost fully achieved. Efficiency is rated Substantial, based on the value for money and cost-effectiveness of interventions, but with multiple negative aspects of implementation that moderately reduced overall project efficiency. The aggregation of these findings is consistent with a Satisfactory outcome rating. This is indicative of essentially minor shortcomings in the project's overall preparation, implementation, and achievement.

a. Outcome Rating Satisfactory

7. Risk to Development Outcome

No consequential risks to maintaining development outcomes were identified. The Government's commitment to the education sector, the continued and well-coordinated donor assistance, and the sufficiency of resources in MINED's normal budgetary allocations to cover equipment maintenance costs and operating expenses help ensure the sustainability of project-financed programs. Moreover, MINED has strong implementation capacity and internalized good project management practices, including a dedication to M&E, incorporating lessons learned, and strong fiduciary and safeguard management capabilities. According to the ICR (p. 35), the main uncertainty is the Government's ability to expand upon the programs that it developed under this project.

8. Assessment of Bank Performance

a. Quality-at-Entry

The project responded to the Government's priorities, built on and drew lessons from its predecessors, and was prepared in coordination with other donors supporting the 2017-2021 national education sector strategy. Implementation and institutional arrangements were specified in detail in the PAD, with responsibility for project management assigned to a unit within MINED that had extensive experience working with the World Bank. The Bank team identified relevant risks at appraisal, such as potential challenges from the use of Performance-Based Conditions (PBCs), which the project sought to mitigate through an extensive communication process, development of a training plan, and careful collaborative design of PBCs to consider MINED's capacity, availability, needs for funds, and motivation to set key milestones critical for achieving the PDO. A shortcoming in the quality of M&E design and arrangements at entry was the adequacy of the outcome indicator for the second objective, with the sole selected

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

indicator being a straightforward output. The major challenges to the project not identified nor mitigated at design - the sociopolitical crisis in 2018 and the COVID-19 pandemic – were factors outside of the government and Bank team control.

Quality-at-Entry Rating Satisfactory

b. Quality of supervision

Adequate supervision and implementation support were undertaken by the Bank task team. According to the ICR (p. 35), the Bank task team worked closely with the government on preparing a restructuring proposal following the project's Mid-Term Review. Processing of the restructuring was appropriately put on hold when the COVID-19 pandemic emerged, and the Bank team worked closely with MINED and its donor partners to help define a response strategy and financing needs to implement this strategy. The initial restructuring proposal was then expanded to adjust the project to pandemic needs and processed together with the AF from the GPE. The Bank's team held routine virtual meetings with MINED during the sociopolitical crisis in 2018 and the initial pandemic stages when missions were suspended.

Quality of Supervision Rating Satisfactory

Overall Bank Performance Rating Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The original Results framework was simple and straightforward, with 3 PDO indicators and 16 intermediate outcome indicators. Indicators were relevant, clearly defined, and measurable. However, the second objective (to improve physical learning conditions in schools) was expressed as an output without an indicator to capture the intended outcome of the investments. The project also included 8 performance-based conditions (PBCs), which had detailed protocols to ensure transparency and accuracy. According to the ICR (p.26) this was the first project in Nicaragua designed as an IPF with PBCs, which "would help to promote a shift in MINED's institutional culture". The project's design envisioned an impact study to enhance the quality of the teacher training and mentoring programs.

b. M&E Implementation

Initial monitoring reports were timely, but at the project's Mid-Term Review (in August 2019), M&E had started suffering delays, due to setbacks in collecting reliable data on activities that had been carried out. The onset of the COVID-19 pandemic deepened the challenges to obtaining monitoring data.

At the first restructuring, minor adjustments to indicator definitions and changes to their targets were made. This included: (i) increasing the target of PDO2 (percentage of preschool teachers with desired teaching practices) to reflect the baseline established that exceeded the original target, (ii) increasing the target of IRI1 (number of in-service preschool teachers certified in the TTP) and IR9 (number of teachers that received educational supplies) to consider the use of AF funds, and (iii) modifying the indicator related to the design and implementation of the School Infrastructure Planning System (*Sistema de Gestión de la Infraestructura Escolar*, SIGIE) to include only its first phase. According to the ICR (p. 30), this was because MINED would have required additional staff and resources to complete the vast number of modules that the system warranted within the project's lifespan. It was agreed that MINED would instead continue with the automation of the first phase, comprised of three modules envisioned for the SIGIE: (a) identification and regulations, (b) furniture and equipment, and (c) tracking and monitoring.

c. M&E Utilization

The ICR (p. 31) stated that the project's M&E was used to inform supervision, trigger disbursements of the PBCs, and guide the first and second project restructurings. It also claims that the project helped to strengthen a culture of data-based decision-making within MINED. As examples, the ICR cites the development of a classroom observation instrument, the continued implementation of large-scale learning assessments, and the fine-tuning of teacher training and teacher mentoring programs according to results. Moreover, the use of PBCs was successful and helped to introduce a culture of results in MINED.

M&E Quality Rating Substantial

10. Other Issues

a. Safeguards

Environmental: The project was classified under Environmental Assessment Category B, as it triggered Safeguard Policy OP/BP 4.01 in view of school construction and civil works. The project also triggered OP/BP 4.11 on Physical Cultural Resources, OP/BP 4.04 on Natural Habitats, and OP/BP 4.09 on Pest Management, given that schools may use pesticides. MINED developed an Environmental and Social Management Framework (ESMF), approved by the World Bank, which classified school subprojects as low or moderate risk. School subprojects classified as moderate risk would require an Environmental Management Plan (EMP), while those classified as low risk would require the application of the Guidelines of Good Environmental and Social Practices (GGESP). Both the ESMF and GGESP included measures related to the management of solid waste, minimization of noise and dust impact, management of wastewater, use of pesticides, control of erosion and stability of slopes, and affectation of soil in working

areas. The ESMF was revised and updated as part of the preparation of the AF and the related COVID-19 response.

Social: The policy on Indigenous Peoples, OP/BP 4.10 was triggered. An Indigenous Peoples and Afrodescendants Plan (IPAP) was prepared for investments in teacher training and distribution of materials, and an Indigenous Peoples and Afro-descendants Planning Framework (IPAPF) was prepared for infrastructure investments. Both the IPAP and IPAPF were informed by consultation processes with Indigenous Peoples and Afro-descendants' representatives.

Safeguards performance was rated Moderately Satisfactory in the first three Implementation Status Reports (ISR) and Satisfactory throughout the remaining of the project's lifetime.

b. Fiduciary Compliance

MINED was responsible for compliance with the Project's financial management (FM) and procurement functions and had previous experience in implementing World Bank-financed projects.

Financial Management: The project's financial management aspects such as budgeting, planning, accounting, financial reporting, flow of funds, external audits, and organization and staff arrangements were adequate throughout project implementation, with only minor delays in the fiduciary processes due to the implementation of (and adaptation to) the new Integrated Financial Administration System (*Sistema Administrativo Financiero de Gobierno*, SIGAF). FM performance was rated Moderately Satisfactory only in the first ISR and Satisfactory throughout the remaining of the project's lifetime.

Procurement: The procurement of infrastructure works experienced small delays due to two quality processes that required additional time, namely: (a) the analysis of pre-investment studies to select the first group of beneficiary schools and (b) the adjustment to the new World Bank guidelines for carrying out Requests for Proposals. Additionally, some procurement processes and the implementation of contracts encountered difficulties triggered by the 2018 socio-political crisis in the country and the COVID-19 pandemic. Procurement performance was rated Satisfactory in all but one ISR, in which it was rated Moderately Satisfactory.

c. Unintended impacts (Positive or Negative)

The ICR reports (p.25) no discernible unintended impacts of the project.

d. Other

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	
Bank Performance	Satisfactory	Satisfactory	
Quality of M&E	High	Substantial	There were moderate shortcomings in M&E design and implementation.
Quality of ICR		Substantial	

12. Lessons

The ICR (pages 36-37) offers insightful lessons (adapted by IEG), including:

- Continuity in staffing in an implementing agency can ensure the sustainability of institutional capacity strengthening and efficient implementation. MINED's strong implementation capacity was due to both a long-standing program of assistance and the continuity of the ministry's staff over time. As a result, previous capacity building efforts have been sustained, previous lessons internalized, and, as a result, implementation could be timely and effective.
- Experience with implementation of environmental and social policies over time can lead to their internalization by the client. Under the Project, MINED staff were fully conversant with the World Bank's E&S policies and had internalized some of its aspects in their internal priorities. For example, MINED chose to translate didactic workbooks into maternal languages using their own resources, as this activity had not been included in the Project.
- The project design as an IPF with PBCs, with both regular reimbursement of eligible expenses and disbursement against the achievement of preidentified targets, was effective and conducive to supporting strong results. As this was the first World Bank results-based project in Nicaragua, a cautious approach, limiting the use of PBCs to one sub-component was appropriate to help gain experience with this financing modality. This initial positive experience with the use of disbursements against results has developed capacity that could be scaled up in other education projects.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR provided a strong and concise overview of the project design. In addition, the ICR included a schematic figure describing the project theory of change (ICR, p.7) that helps readers quickly understand the intervention logic. Finally, the ICR also presented an adequate description of implementation challenges, how they were addressed, and an annex with the detailed changes introduced in the results framework by the second restructuring (ICR, p.69-76, Annex 6). However, the ICR had minor shortcomings, namely some internal inconsistencies (that were cleared up in conversations with the Bank team) and limited information on

outcomes under the second objective. Notwithstanding these shortcomings, the quality of the ICR is rated Substantial.

a. Quality of ICR Rating Substantial