



1. Project Data

Project ID
P111661

Project Name
CL Tertiary Edu. Fin. for Results III

Country
Chile

Practice Area(Lead)
Education

L/C/TF Number(s)
IBRD-81260

Closing Date (Original)
31-Oct-2016

Total Project Cost (USD)
100,000,000.00

Bank Approval Date
13-Mar-2012

Closing Date (Actual)
31-Oct-2016

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	40,000,000.00	0.00
Revised Commitment	40,000,000.00	0.00
Actual	40,000,000.00	0.00

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2. Project Objectives and Components

a. Objectives

According to the Loan Agreement (page 6) and the Project Appraisal Document (PAD, page 5), the project objective was as follows:

- **To improve quality and relevance for students in tertiary education by strengthening the link between funding of tertiary education institutions and accountability for performance.**

The project objective remained the same throughout the project period. Targets for several key outcome indicators were revised during project restructuring, due to availability of additional data that helped to establish more accurate baseline figures (and hence led to adjustment in targets). These targets were



revised *upward*; therefore, a split rating is not applied, and the Efficacy discussion below uses the revised targets to assess extent of achievement of objectives. (For completeness, however, both original and revised targets are mentioned.)

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

1. Performance Agreements (Appraisal: US\$ 155.0 million; Actual: US\$ 155.0 million): This component was to support the Performance Agreement modality by which Tertiary Education Institutions (TEIs) would receive discretionary funding for activities to improve quality and relevance of tertiary education. The aim of these Performance Agreements between the government and individual TEIs was also to strengthen the link between funding and accountability for performance, as the TEIs needed to reach specific milestones in order to access the funding. The menu of potential activities included: remediation classes to strengthen students' basic core competencies; activities to strengthen managerial capacity of TEIs; teacher training; academic innovation activities; and curriculum revisions. The Performance Agreements were open to all three types of TEIs: technical training centers, professional institutes, and universities.

2. Policy Support and Project Management (Appraisal: US\$ 5.0 million; Actual: US\$ 5.0 million): This component was to support policy studies for tertiary education sector reform efforts and institutional changes, as well as project management support to the Division of Higher Education in the Ministry of Education.

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

Project cost

- The appraised and actual cost of the project was US\$ 160.0 million.

Financing

- The project was financed in part by an IBRD loan of US\$ 40.0 million.

Borrower contribution

- The government contributed US\$ 120.0 million, as planned.

Dates



- *June 2013*: While the project was approved by the Bank Board in March 2012, it did not become effective until June 2013, for several reasons: the Loan Agreement was not countersigned by the Treasurer and Controller General of Chile until March 2013, and therefore the Loan had to be reinstated by the Bank; the project code for the loan was incorrectly recorded in Chile's Budget Law, which could only be corrected once the government requested a supplemental budget; and a new Minister of Education entered office in April 2013, which led to staff turnover. Project implementation was still able to begin in August 2012 using government funds.
- *September 2014*: Targets for several key outcome indicators were revised (upward) due to additional data that helped to establish more accurate baseline information. Disbursement estimates were also corrected to reflect delays in project effectiveness.
- *July 2015*: Two of the original key outcome indicators (average duration of undergraduate studies and employer perception of quality and relevance) were dropped, while two new key outcome indicators were added (percentage of students in teaching degree programs with redesigned curricula and percentage of students in technical/professional degree programs with redesigned curricula).

3. Relevance of Objectives & Design

a. Relevance of Objectives

There are approximately one million students in tertiary education in Chile, out of a total population of seventeen million people. Degree programs range from short technical degrees to full doctoral programs at approximately 200 tertiary education institutions in the country. As noted in the PAD (page 2), Chile has made notable progress in increasing access to tertiary education (the number of students from the lowest two income quintiles recently tripled to reach 25% of total enrollment (PAD, page 1)); however, remaining challenges exist with regards to the quality and relevance of tertiary education. More specifically, there are issues of low quality of instruction (due in part to the low numbers of professors holding PhDs), ineffective curriculum (lack of practical learning and low relevance to the labor market), lack of institutional focus on quality, and low academic readiness of incoming students. Addressing these challenges is directly relevant to the broader country development objectives (as reflected in its most recent development plan, Chile Pais Desarrollado, 2010) to increase productivity of the workforce and boost economic growth. The Bank's Country Partnership Strategy for FY 2011-2016 included job creation as a key results area, similarly highlighting improving the quality and financing of tertiary education.

Rating
High

Revised Rating
Not Rated/Not Applicable

b. Relevance of Design

The project offered support to all three types of institutions in Chile's tertiary education system: universities, technical training centers, and professional institutes. The menu of possible activities was directly linked to



improving quality and relevance of teachers, students, and curricula, and therefore it was substantially likely that project support would lead to the intended outcomes.

The project's performance-based financing mechanism was appropriate given the need to focus on “second generation” reforms that are increasingly complex, such as increasing accountability by linking funding to performance. According to the PAD (page 2), in 2010, about 87% of resources given to TEIs were allocated according to historical criteria, not necessarily based on performance. The project funding mechanism was one way of channeling discretionary funding to TEIs in order to help them achieve incremental improvements in quality and relevance, as well as to increase institutional capacity of TEIs to manage for performance.

Rating
Substantial

Revised Rating
Not Rated/Not Applicable

4. Achievement of Objectives (Efficacy)

Objective 1

Objective

To improve quality for students in tertiary education

Rationale

Outputs

- Signing of 179 Performance Agreements (original target: 58; revised target: 29) between the government and 45 TEIs, out of a total of approximately 200 TEIs in the country (source: project team). Of these:
 - 19 were for teacher training (original target: 12; revised target: 6). Examples of activities: redesigned pedagogy curricula, hiring and supplemental training of faculty to increase instructional capacity of teaching staff, creation of learning support centers (to monitor student academic progress), and teaching vocation campaigns to attract more qualified students to the profession.
 - 17 were for technical/professional training (original target: 10; revised target: 5). Examples of activities: redesigned vocational training curricula, integration of technology, remediation, credit transfer systems, internships, and networks with foreign schools to share knowledge.
 - 24 were for academic innovation (original target: 12; revised target: 6). Examples of activities: redesigned curricula to make them more skills-based, innovative and entrepreneurial; student support centers; internships; and student exchange programs.
 - 119 were for small-scale projects (original target: 24; revised target: 12). Examples of activities: integration of technology, remediation, and harmonization of curricula.



- Of all the indicators to be monitored in the 179 Performance Agreements (including Agreements still in execution at project closing), 71.3% were achieved. This achieved the target of 70.0%.
- Completion of academic remediation programs by 69,497 students in project-support TEIs (original target: 50,000; revised target: 65,000). This compared to 30,503 students in *non*-project supported TEIs.
- Completion of PhD programs by 208 students (target: 200).
- Completion of two policy studies and one policy note: Offices of Institutional Analysis Study (improved management information systems); Employer Perception Study (employers' assessments of quality and relevance of graduates); and National Qualifications Framework for Higher Education Policy (development of set of quality standards). The original project design indicated that potential new institutional arrangements could be supported by the project, including a new Under-Secretariat of Tertiary Education and a new Student Financial Aid Agency; however, these did not materialize.

Outcomes

- The number of full-time equivalent (44 hours/week or more) faculty members who hold PhDs increased from 5,109 in 2014 to 8,332 in 2016. This surpassed the original target of 4,900 (originally set using incomplete data) and the revised target of 7,500. Of the 8,332 full-time equivalents, 95% were at TEIs supported by various project activities. According to the project team, some of the TEIs utilized funding from the Performance Agreements to hire PhD-holders onto its faculty, drawing from industry and international institutions.
- The retention rate for first-year undergraduate students increased from 68.4% in 2011 to 71.3% in 2016. Although this fell short of the overall target of 72%, the rate is higher for students in project-supported TEIs (73.8%) compared to students in *non*-project supported TEIs (67.4%). As clarified by the project team, the remediation activities contributed to improved academic readiness of students and therefore higher rates of passage from first-year to second-year studies.

Achievement of the *quality* aspect of the objective is rated Modest due to lack of sufficient evidence of improved quality. Teaching credentials have improved, and academic readiness of students *in need of remediation* (though not necessarily for other students) has improved; however, there is limited evidence presented of actual improvements in educational quality.

Rating
Modest



Objective 2

Objective

To improve relevance for students in tertiary education

Rationale

Outputs

- Redesign of teaching degree curricula in 71.2% of project-supported TEIs (target: 60%). The revisions incorporated input from the Ministry of Education on weaknesses in primary and secondary learning outcomes, as well as from external consultants who advised TEIs on integration of current international best practices for classroom teaching across various subjects and grade levels (ICR, Data Sheet).
- Redesign of technical/professional degree curricula in 202 TEIs (target: 150). The revisions incorporated input from consultations with the private sector and civil society on labor market needs, in alignment with international best practices.

See also outputs reported above on Performance Agreements.

Outcomes

- The proportion of students in project-supported teaching degree programs that now include a teaching practicum reached 70.5%. This surpassed the target of 25%. The ICR (page 23) reports preliminary results from the Employer Perception Study that showed that employers “more positively value the education and training” received by teachers at project-supported TEIs; no specific data are reported.
- The proportion of students in project-supported technical/professional degree programs that now include integrated enhanced curricula reached 89.4%. This surpassed the target of 50%, in part due to a majority of TEIs that implemented the enhanced curricula (including in areas of computer science, engineering, contracting services, and medical support services that were specifically designed to meet the needs of the labor market (ICR, page 4)) for all matriculated students, not just those entering as first-year students. This compares to only 34.3% of students in *non*-project supported TEIs.
- Data on graduate employment rates, while very limited, suggest improved employability of students. Three TEIs reported increased graduate employment rates of 81% to 89%, 70% to 88%, and 91% to 97%, respectively. These TEIs redesigned curricula to include practical work experience, i.e. internships.

Achievement of the *relevance* aspect of the project objective is rated Substantial due to evidence of increased linkages or increased alignment between the curricula and labor market needs.

Rating

Substantial



5. Efficiency

At project appraisal, the expected economic value of the project was assessed through net present value analysis of three expected benefits: reduced time to graduation, increased wage premium for having completed tertiary level education, and increased first-year retention rate (leading to higher graduation rates). The net present value for each of the three benefits was given as increased US\$ earnings, ranging from US\$57 million - US\$ 750 million. These figures compare favorably to the appraised total project cost of US\$ 160 million.

For the ICR, the same methodology is applied but only for the benefit of increased first-year retention rate. The benefit of reduced time to graduation was considered small (a reduction of only ten days), and the benefit of increased wage premium was considered too difficult to quantify. Therefore, the ICR analysis only considers the increased first-year retention rate, which is reported as having increased 4%. The net present value of this benefit ranges from US\$ 57 - 170 million, which is comparable to the PAD estimate. However, it is unclear whether this compares favorably to the actual project cost of US\$ 160 million.

Regarding efficiency of implementation (i.e. efficient use of project resources), the project activities were implemented in a timely manner and completed by the original project closing date, even surpassing the output target for the number of Performance Agreements. The achievement rate for reaching indicator targets was 71.3%, which is significant but indicates that more than 25% remained incomplete. The ICR (page 26) also suggests that the performance-based financing model “created an incentive to use resources more effectively and efficiently” as compared to the prior practice of using historical criteria to allocate resources; however, no specific evidence is provided.

Due to the lack of robust evidence - including the lack of comparability between PAD and ICR analyses and the inadequacy of information on implementation efficiency - efficiency is rated Modest.

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		0	0 <input type="checkbox"/> Not Applicable



ICR Estimate	0	0 <input type="checkbox"/> Not Applicable
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* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

Relevance of the project objective is rated High, and relevance of the project design is rated Substantial. Achievement of the project objective to improve quality and relevance for students in tertiary education is rated Modest for *quality*, due to lack of sufficient evidence, and Substantial for *relevance*. Efficiency is rated Modest, also due to lack of robust evidence. Taken together, these ratings are indicative of moderate shortcomings in the project's preparation and implementation, and therefore an Outcome rating of Moderately Satisfactory.

a. Outcome Rating

Moderately Satisfactory

7. Rationale for Risk to Development Outcome Rating

The government has continued to demonstrate strong commitment to the project objectives. The government has institutionalized the project implementation unit and renamed it the Department of Institutional Financing, with responsibility for all public funding for TEIs. A follow-up Bank project is under preparation to continue the Performance Agreement funding modality, which will remain focused on improving quality and relevance of tertiary education. TEIs also gained capacity in managing for results, and changes such as curriculum design are likely to be sustained.

a. Risk to Development Outcome Rating

Negligible

8. Assessment of Bank Performance

a. Quality-at-Entry

The Bank had a well-established track record of working in tertiary education in Chile, through both lending and analytic work. There were two predecessor projects in the sub-sector that addressed policy issues on quality and relevance, increasing TEI managerial capacity, and piloting the performance-based funding mechanism. Thus, there was a strong analytical and operational foundation for this project, while also taking into account lessons learned to scale up the project (i.e. the need to include vocational schools, and the



provision of larger-sized grants). The overall risk rating was appropriately assessed as Moderate, given the proven implementation capacity of the Ministry of Education and government support, although tertiary students were becoming more politically active and expressing dissatisfaction with the quality and equity of education opportunities; thus, there was some risk of these stakeholders' impact on project implementation. The results framework had some shortcomings in that baseline data were not available for several indicators, thereby affecting the realism of targets.

Quality-at-Entry Rating

Moderately Satisfactory

b. Quality of supervision

The Bank team worked effectively with the counterpart project team to resolve various implementation challenges, such as delayed effectiveness (and delayed availability of project funds) and adjustments to the supervision model to allow flexibility to meet institutional needs of each individual TEI. Project restructurings included revisions to the results framework, which strengthened focus on development impact and adjusted outcome targets based on updated data. However, there remained shortcomings in the robustness of indicators; in particular, the two dropped indicators on the average duration of undergraduate studies until completion and employer perception of quality and relevance of graduates may have been better measures of "quality" but were not replaced with equivalent indicators. Implementation Supervision Report ratings appear to have been accurate reflections of project progress. There were no major fiduciary or safeguard problems reported.

Quality of Supervision Rating

Moderately Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. Assessment of Borrower Performance

a. Government Performance

The government was strongly committed to the project objectives and the relevant policy goals of improving quality and relevance of tertiary education. There were significant delays in project effectiveness due to procedural delays in the government and a change in the Minister of Education; however, counterpart funds were able to be used during the delay period to ensure that project implementation stayed on track. Counterpart funding was provided in full.

Government Performance Rating

Moderately Satisfactory



b. Implementing Agency Performance

The project implementation team in the Division of Higher Education had significant experience from implementing the Bank's previous higher education projects. This staff was supplemented by "negotiators" who mediated between the TEIs and the Ministry of Education, to ensure that individual TEIs' activities were aligned with national policy goals and could realistically be implemented. The team was effective in tracking numerous indicators for multiple Performance Agreements to ensure project progress. The accountability element of the Performance Agreements also contributed to increased transparency in public funding. There were no fiduciary or safeguard problems reported.

Implementing Agency Performance Rating

Satisfactory

Overall Borrower Performance Rating

Moderately Satisfactory

10. M&E Design, Implementation, & Utilization

a. M&E Design

The original results framework had some shortcomings. For the indicator on the average duration of undergraduate studies until completion, the causal chain was driven by two key outputs - curricular reform and remedial support – that would not be completed in time to be captured in current students' graduation time frames. Also, while the key indicator on retention rate is appropriate for students in need of remediation, it does not measure quality of education for other students. Regarding M&E arrangements, the predecessor project had established a tertiary education information system that was expected to provide adequate data on tertiary education and labor market outcomes for graduates. Each TEI was responsible for monitoring its progress on performance agreements, while the Department of Institutional Financing was responsible for evaluating overall progress on achieving milestones.

b. M&E Implementation

The results framework was amended in July 2015, in order to "increase the coherence of the project's results chain." Two of the original project indicators were dropped: the first indicator that measured the average duration of undergraduate studies until completion, and the second indicator that measured employer perception of quality and relevance of graduates (as a proxy for increased employability and wage premiums) due to the lack of baseline (the survey planned for the beginning of the project period was not conducted in time to provide a baseline). Two new indicators were added: percentage of students in teaching degree programs with redesigned curricula, and percentage of students in technical/professional degree programs with redesigned curricula. These latter two indicators were more measurable indicators for "relevance," but there still lacked a robust measurement of "quality." Overall, the project implementation team effectively monitored the range of indicators for all Performance Agreements, reporting on progress in achieving



milestones. An evaluative study on employer perception of quality was completed, but not in time to serve as a baseline.

c. M&E Utilization

According to the ICR (page 19), the M&E information was utilized in two ways: it allowed the project implementation team to identify Performance Agreements that had "stalled" and where institutional support was inadequate, and thus regulate the disbursement of funding as needed; it also informed TEI workshops on topics relevant to improved implementation of Performance Agreements.

M&E Quality Rating

Modest

11. Other Issues

a. Safeguards

The project was classified as an Environmental Category "C" project, and therefore no environmental assessment was required.

The safeguard policy on Indigenous Peoples (OP/BP 4.10) was triggered, to ensure that potential benefits for indigenous populations could be realized. An Indigenous Peoples Planning Framework was prepared as part of project preparation, to ensure that proposals were received from TEIs where the indigenous population comprised more than 14% of total enrollment. In compliance with the Framework, TEIs were invited to prepare proposals serving Indigenous Peoples; three Performance Agreements were approved that included remediation programs to strengthen basic competencies and establishment of student centers. (ICR, p. 19)

b. Fiduciary Compliance

Financial management: The ICR (page 20) reports that the finance team was effective in overseeing compliance with financial management requirements and that regular financial reports were produced in a timely manner in accordance with International Accounting Standards. Financial audits were submitted in a timely manner and unqualified.

Procurement: The ICR provides limited information on procurement performance, other than that there were no significant delays in the implementation of Performance Agreements attributable to procurement issues.



c. Unintended impacts (Positive or Negative)

None reported.

d. Other

12. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	---
Risk to Development Outcome	Negligible	Negligible	---
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---
Borrower Performance	Moderately Satisfactory	Moderately Satisfactory	---
Quality of ICR		Substantial	---

Note

When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.

The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

13. Lessons

- Lack of a robust results chain with clear links between project activities and intended outcomes (achievable and measurable within the project time frame) can create significant challenges in assessing project achievements. In the case of this project, the results chain was not well established at the beginning of the project; numerous indicators had to be dropped/revised/added during project restructuring due to lack of relevance and measurability.
- Studies intended to inform sector policy have limited impact if not backed by the relevant oversight authority (adapted from ICR, page 31). In the case of this project, the project's policy support activities were not executed in a timely manner due to lack of direct high-level oversight, and there was no evidence of impact on ongoing reforms .



14. Assessment Recommended?

No

15. Comments on Quality of ICR

The ICR has a strong focus on outcomes, as reflected by multiple discussions of the results framework and the need for modifications. In addition, the ICR includes a significant amount of quantitative evidence and data, in an effort to document improvements in hard-to-define outcomes of quality and relevance. Given that this was the third project in a series of closely-related higher education projects in the country, the ICR does a commendable job of highlighting the incremental changes in project design and implementation arrangements. Discussion of Bank Performance (Quality at Entry and Quality of Supervision) is brief, perhaps a missed opportunity to inform future operations.

a. Quality of ICR Rating

Substantial