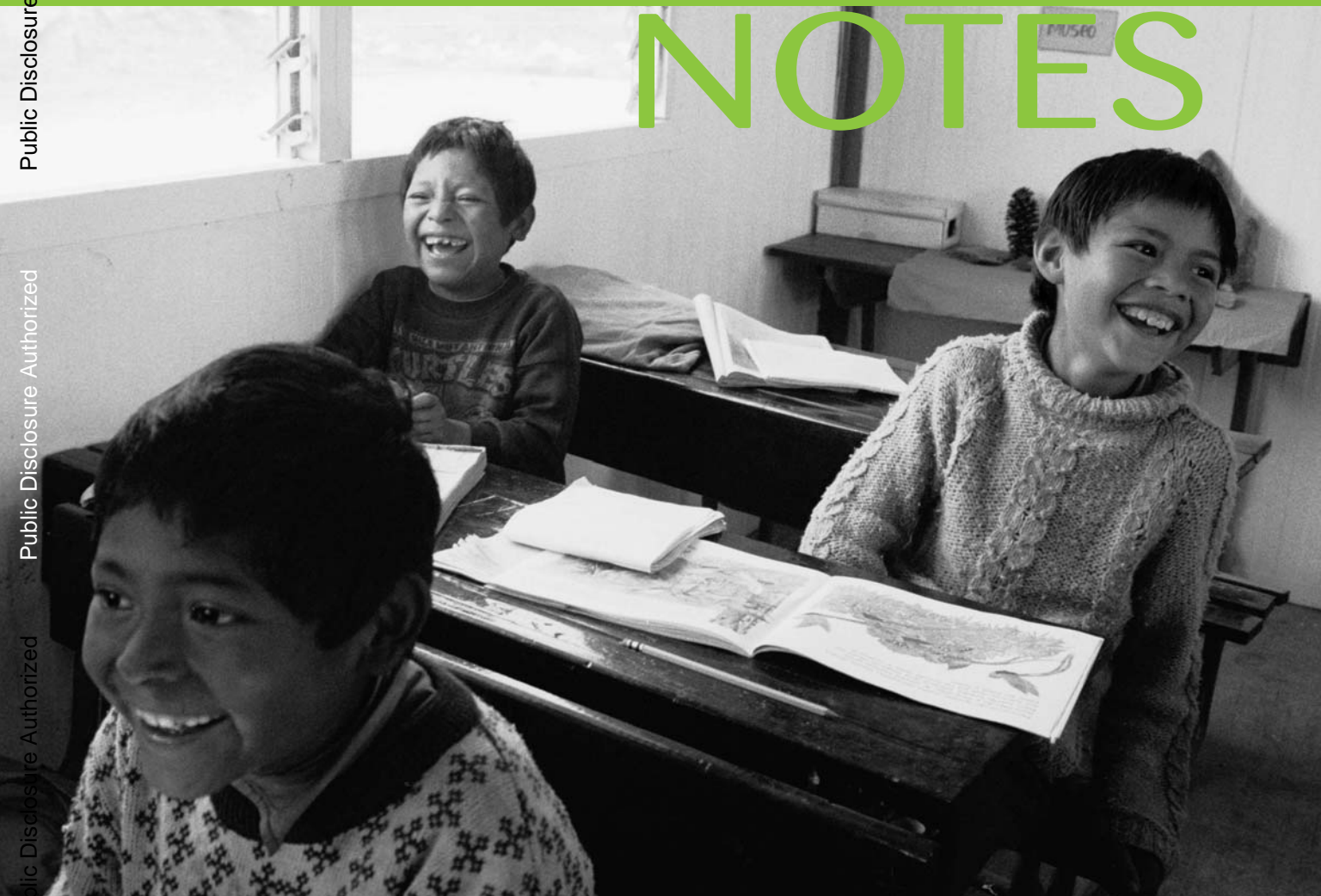


Education NOTES

Public Disclosure Authorized

Public Disclosure Authorized

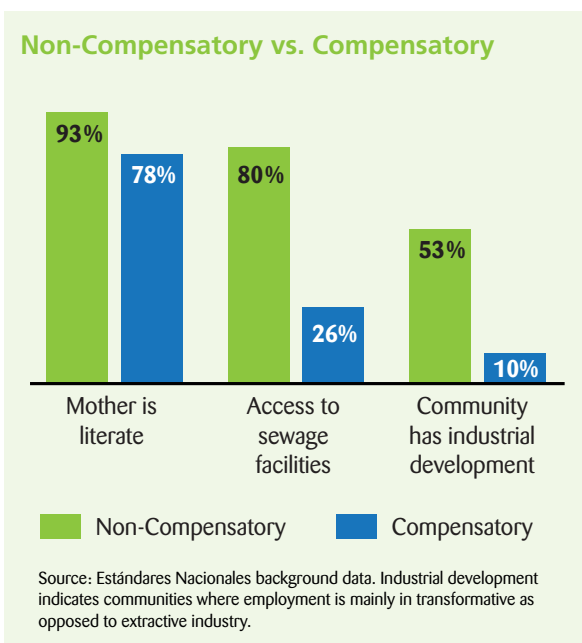
Public Disclosure Authorized



Education for All: Compensating for Disadvantage in Mexico

Education for all means learning for all. It means closing the “advantage” gap—making sure that the children of the poor and disadvantaged achieve the same levels of learning as all other children. This is one of the great challenges any country can face. It is a particular challenge in a diverse country such as Mexico, where many children do not speak Spanish, live in villages inaccessible by roads and cannot afford such basic expenditures as school uniforms.

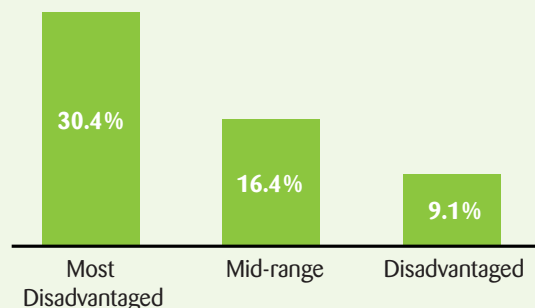
Mexico began as early as 1971 to address the challenge of including its most disadvantaged children by creating the National Council of Education Promotion (CONAFE). In the 1990s, the Secretariat of Public Education (SEP) created the compensatory education program (CP) to support the most disadvantaged schools and nearly all indigenous schools. CONAFE implements the CPs, which support more than three million students in pre-primary and primary education, including about one million indigenous primary school students. The CP also supports about one million students in telesecundaria education (secondary education delivered via satellite television to remote communities).



Nearly every indigenous school and every telesecundaria school receives support from these programs. CONAFE selects other schools for support based on the average income of the school's community, the school's isolation and access to public infrastructure, the school's education indicators and other indicators of poverty.

For schools that enroll indigenous students, CONAFE supports development of curricula, didactic materials and textbooks in an indigenous language and Spanish to facilitate bilingual education. CONAFE, through the CPs, also supports the development of

Primary School Global Test Score Inequality Eliminated by Compensatory Programs Annually (%) 1998–2002



Source: Estándares Nacionales 1998–2002. Inequality is average test score difference between CP and non-CP students. "Disadvantage" represents background poverty indicators such as illiteracy prevalence in community, access to public services, etc.

intercultural education for indigenous students. For disadvantaged rural schools, the CPs provide updated audiovisual technology, professional development of teachers, improvements to school infrastructure and other interventions designed to improve the learning outcomes of disadvantaged Mexican students. In most beneficiary schools, a group of community parents and leaders receive a grant that can be spent on the educational purpose selected by the group.

A recent evaluation of the impact of SEP's compensatory programs finds that they are effective in improving primary school math learning and secondary school Spanish learning. Telesecundaria education and bilingual education for indigenous students are both shown to improve student achievement. In addition, the program has resulted in lower repetition and failure rates.

Compensatory Programs Increased Primary School Test Scores and Decreased Inequality

The communities in which CP-supported schools are located have significantly lower levels of literacy, access to public services and industrial development than do the communities of non-CP schools. Yet, a World Bank (2002) evaluation found that indigenous students supported by the CPs were catching up to their non-indigenous peers in test scores by about 10 percent per year. An additional IDB-sponsored evaluation found that telesecundaria schools were effective

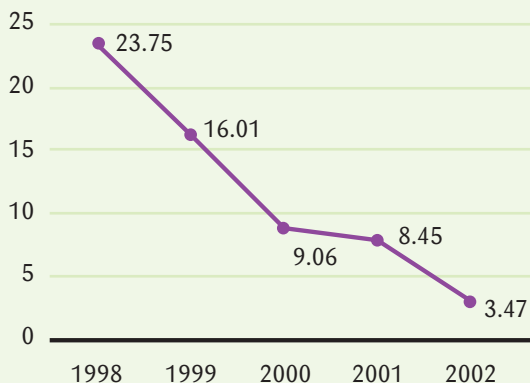
in increasing math and language test scores. The report found that telesecundarias entirely eliminated the math performance gap between telesecundaria and non-telesecundaria students, though telesecundaria education was not as effective in Spanish instruction.

Spanish and math scores of students supported by the CPs increased significantly over the sample period. These students gained on non-CP students by 2.4 to 4.3 points per year in a math-Spanish composite score. The programs also decreased test score inequality between CP and non-CP students by 9% annually for the less-disadvantaged group and by 30% annually for the disadvantaged group. These results show that the programs are most effective in eliminating learning inequality for students with the most disadvantaged backgrounds. CONAFE's Spanish and math programs both improve student learning; however, it appears that its effect on math may be larger than its effect on Spanish at the primary level.

Compensatory Programs Improve Indigenous Student Primary School Performance

Indigenous student exam performance increased over the sample period by an annual average of 27 points on math exams and 12 points on Spanish exams. The programs decreased the gap in math scores between comparable CP and non-CP students by 5 points

Math Score Inequality between Compensatory and Non-Compensatory Students, Primary School



Source: Estándares Nacionales 1998–2002. Data represent students progressing from 2nd grade in 1998 to 6th grade in 2002.

annually. Analysis found no significant effect of the CPs on Spanish scores of indigenous students.

Compensatory Programs Improve Secondary School Math and Spanish Learning

Spanish and math scores of telesecundaria students increased over the sample period from a composite average of 499 points in 2000 to a composite average of 540 points in 2002. For the less-disadvantaged group, telesecundaria education eliminated 24% of math score inequality and 38% of math score inequality between telesecundaria and non-telesecundaria students. It appears that telesecundaria education is more effective for Spanish instruction than for math instruction. This contrasts with CPs' primary school programs, which appear to be more effective for math than for Spanish instruction.

Lessons Learned

Compensatory programs do work. If they are well-designed and properly targeted, compensatory programs can significantly reduce the "advantage" gap. Mexico's compensatory programs are effective and well targeted. CPs have improved student exam performance and decreased inequality between CP and non-CP students. These results hold even when controlling for relevant background variables. The compensatory programs are achieving the goal of improving and expanding education quality for all.

Remaining Challenges

While evaluation effectively formed control groups against which to compare CP students and has measured the effect of CPs on test scores, repetition, and failure rates, several areas of potential research remain.

- Research using data on CP support disaggregated by type of support could show which aspects of CP interventions make it effective.
- Research could focus on the long-term effects of CP interventions. Compensatory programs seek to decrease poverty and inequality. If long-term data became available that followed CP students

Education in Mexico

Socio-Economic Indicators:

Population (millions)	100.9 (2002)
GNP per capita	US\$ 5,910 (2002)
IDA/IBRD	IBRD
PRSP	No
HIPC	No

Education Indicators:

Adult illiteracy rate (population 15 and older)	8.3% (2002)
Primary gross enrollment rate	113% (2000)
Primary completion rate	100% (2000)
Secondary gross enrollment rate	75% (2000)
Tertiary gross enrollment rate	21% (2000)
Total education spending as % of GDP	4% (1999)

through adulthood, that data could show whether CPs decrease poverty and inequality among adults.

- Research could also conduct qualitative evaluation of the effect of CP support on parents and com-

munity involvement in education. CPs may inspire parents to more strongly support public education in ways that affect student participation and achievement; if so, capitalizing on the potential support of parents could magnify CPs' effect.

This note series is intended to summarize lessons learned and key policy findings on the World Bank's work in education. The views expressed in these notes are those of the authors and do not necessarily reflect the views of the World Bank. For additional copies of Education Notes, please contact the Education Advisory Service by email at eservice@worldbank.org or visit the web site: <http://www.worldbank.org/education/>

**Principal Authors: Harry Anthony Patrinos, Joseph Shapiro and Jorge Moreno Trevino.
Photographs provided by the National Council of Education Promotion (CONAFE).**