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# Education in Mexico

## Challenges and Opportunities

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Sponsored by The William and Flora Hewlett Foundation



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## SUMMARY

This documented briefing reports on research designed to assist The William and Flora Hewlett Foundation to identify opportunities for investment in Mexican education. The goal of this study is to provide the foundation with background and contextual information on the K–12 education system in Mexico. It highlights the main educational issues in the country and the challenges associated with them, and identifies opportunities for Hewlett in Mexican education.

This project followed a three-tiered approach. First, to describe the current status of the educational system in Mexico, we commissioned a background paper from Valora S.A., a private education-consulting firm based in Mexico City. Second, we conducted a literature review of recent education research. Third, we identified and interviewed several key stakeholders in education in both the government and private sectors. These stakeholders were located in Mexico City and three selected states: Jalisco, Nuevo León, and Aguascalientes. These three states were selected because they have large and highly reputed universities engaged in education research, have built strong academic communities in education, and have recently elected governments that are currently in the process of setting up educational priorities for the state.

### *Mexico's Education System*

The Mexican education system is organized into four levels: preschool (K1–K3), compulsory basic education (grades 1–9), upper secondary education (grades 10–12), and higher education. The government is only officially responsible for providing compulsory basic education, although it is also involved at the other three levels through public provision of preschool and upper secondary as well as public funding of higher education in most states. Public schools serve 87 percent of all students in the country. Governance is centralized as the national level with the *Secretaría de Educación* (SEP)—setting the curriculum, selecting textbooks, hiring and firing school personnel, and setting salary schedules. Although Mexico decentralized the basic education system to its 32 states in 1992, this reform was mostly administrative, and did not diminish the centralization of decisionmaking. Overall, teachers and school administrators have little autonomy in the system.

Mexico's public spending on education amounts to 5.9 percent of gross domestic product (GDP) per capita, above the Organization for Economic Co-operation and Development (OECD) average of 5.6 percent. The government currently spends about \$28 billion yearly on education, almost a quarter of its programmable budget. On average, states fund 85 percent of education spending through federal transfers.

The Ministry of Education (SEP) and the teachers' union (SNTE) are the two main actors in the education policy arena. International organizations such as The World Bank and the Inter-American Development Bank also have a major and longstanding presence in Mexican education. Even though only a very small fraction (from 1 to 5 percent) of

Mexico's educational budget is provided by such lending agencies, their influence on policies and educational reform is considerable and tied to large loans given to the Mexican government. Private foundation work (national and international) is not wide-ranging and business organizations in particular play a very limited role. Although parent groups are growing in popularity and influence, they still play a very limited role.

Key issues in Mexican education have to do with insufficient enrollments and high dropout rates beyond the primary level, insufficient supply of upper secondary schools (particularly in rural areas), and low student achievement levels. At the national and state levels, problematic issues include teacher training and a lack of research and evaluation that can inform school improvement efforts.

There are four major national government programs aimed at alleviating some of the issues outlined above. *Oportunidades* (formerly known as PROGRESA) provides cash grants to low-income families so that their children can attend school and health services. *Enciclomedia* digitalizes the school curriculum into CD-ROMs so students can learn interactively with the aid of computers. *Programa Escuelas de Calidad*, or quality schools program, targets low performing schools. Schools must consent to implement a school wide reform project; in exchange they receive grants of up to \$10,000 to be used mainly for infrastructure improvements. Last, for over 10 years, SEP has had in place a wide range of compensatory programs aimed at improving school infrastructure, equipment, and materials, and providing incentives to teachers and school principals in order to decrease teacher absenteeism and improve school supervision functions.

#### *Enrollment and Educational Performance*

Basic education enrollments grew considerably between 1970 and 2000 from 9.7 million students in 1970, to 21.6 million students in 2000. This rapid growth in demand for basic education was primarily met through double shifting of schools and teachers and the provision of distance learning models in lower secondary schools (grades 7–9). Currently, the entire system (kindergarten, basic education, upper secondary, and higher education) enrolls close to 31 million students.

Enrollment varies by level.<sup>1</sup> Enrollment of children of primary school age is high in basic education (grades 1–9), which includes primary and lower secondary, although it varies by level. It is very high in primary schools (grades 1–6) (93 percent), but lower in lower secondary schools (grades 7–9) (86 percent of schedules of lower secondary school age). Enrollment is particularly low in preschool (56 percent) and upper secondary schools (51 percent). These enrollment rates mean that out of every 100 students entering the first grade of primary school in Mexico, around 68 of them will complete all nine years of basic education. Thirty-five of these will go on to graduate from upper secondary. And only slightly more than 8 percent of the population aged 18 and older in Mexico holds a bachelor's degree.

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<sup>1</sup> Enrollment is defined as the proportion of total enrollment in a particular level over the number of students in a specific age group.

Educational attainment and achievement levels in Mexico are generally low, although they have improved greatly in the past 10 years. In 2003, average educational attainment of the population aged 15 and older was 7.9 years; in 1993 it was 6.8 years. During the 1990s, Mexico has applied national examinations to its students to test for subject competency. Results published in 2003 by the *Instituto Nacional para la Evaluación Educativa* (INEE) revealed that 45 percent and 15 percent of sixth graders in urban primary schools achieved satisfactory or above satisfactory competency in reading and math, respectively. Results for sixth graders in rural and indigenous primary schools were even lower. Only 76 percent and 50 percent of ninth graders in secondary schools achieved satisfactory or above satisfactory competency in reading and math, respectively. Results were lower for students in technical and distance lower secondary schools. Mexico has not fared very well in recent international examinations. On the Third International Mathematics and Science Study (TIMSS) conducted in 1995, Mexican students placed last or second to last among a group of countries that included mostly developed nations. Even in Latin America, Mexican student-performance is among the lowest.

#### *Status of Education Research in Mexico*

Education research and evaluation in Mexico is scant. The Mexican education system lacks transparency and has no tradition of supporting objective evaluations. The Ministry of Education conducts a fair amount of research but for its own internal purposes, subcontracting most of it to academic or national research centers. Education researchers in Mexico favor qualitative approaches. Large-scale data are difficult to access, which has limited the development of quantitative research in the country. Although SEP collects a wealth of information on schools and students, it rarely makes it publicly available. Another reason for insufficient high-quality education research and evaluation in Mexico is the low research capacity in the system. In 2002, Mexico graduated a total of 1,250 Ph.D. students in *all* disciplines; 140 of these obtained doctorates in education and the humanities. As a comparison, in 2002, U.S. institutions of higher education awarded 6,700 Ph.D. degrees in education alone. Even if we adjust for differences in population size, the disparities are large. On a per-capita basis, Mexico graduated 1.4 education Ph.D.'s per every million inhabitants, while the United States graduated about 22. In addition, few graduate programs in education in Mexico are considered to be high-quality.

#### *Opportunities for The William and Flora Hewlett Foundation*

We considered three factors in assessing opportunities for Hewlett's involvement in Mexico's education: the potential for long-term national impact; the level of investments that may be required, and the foundation's long-standing history in supporting policy and evaluative research.

We concluded that the most promising prospect for Hewlett would be in helping to build Mexico's institutional capabilities to develop a broader understanding (and public transparency) of the Mexican education system and provide empirically supported feedback on existing programs and policies. Such a focus would provide for making

gradual, but cumulative, large or small investments and an opportunity for Hewlett staff to develop relationships with key actors without whose cooperation little can be accomplished. It also offers the prospect for having a long-term national impact and over time may open the door for supporting programmatic investments.

Overall, we consider that there are few, if any, immediate programmatic opportunities for the foundation at either the national or the state level. At the national level, the government is currently engaged in developing and implementing large-scale initiatives designed to address the key coverage and student achievement issues we identified. Any efforts on the part of the foundation in this area would require developing trusting relationships with the Ministry of Education and the Union—a slow endeavor—and eventual large, and possibly risky, investments in order to have a real effect. At the state level, programmatic initiatives tend to be opportunistic and short-lived and similarly would require large investments of time by foundation staff to develop the contacts and relationships that would allow for opening up opportunities.

Should the foundation choose to get involved in building Mexico's institutional capabilities for policy and evaluative research, it can do so by engaging in one or more of the following activities: (1) helping establish a policy research center; (2) supporting public and academic forums on specific issues; (3) helping develop centralized access to education research and data; (4) funding system-wide descriptive studies; and (5) funding objective evaluations of ongoing school reform initiatives.