

## EDUCATION SECTOR ASSESSMENT

### I. Introduction

This paper highlights the Early Child Development (ECD) in Brazil, a sector assessment carried out on a publication by the Human Development Department of World Bank's Brazil Country Management Unit. The sector assessment was published on September 24, 2001. The goal of this paper is to critically analyze the strengths, weaknesses, and policy recommendations of Brazilian preschool sector and to lay out the challenges facing policy makers.

Brazil suffers from a substantial education deficit with an average schooling of 5.8 years compared with 9.5 years in OECD countries in spite of a big improvement over the last 20 years. On the other hand, as Gini index -an international indicator of income distribution- reveals, Brazil has one of the highest disparities in the world between rich and poor.

ECD services mainly include day care, preschool, home visits by trained professionals, health and nutrition services, and parental education. Private institutions constitute about 44 percent of all formal preschool and day-care services while the remaining 56 percent are the public school enrollments. Nonformal ECD services, through home visits, day-care centers, training, and literacy centers, have been low-cost alternatives to formal public preschools.

### II. Strengths

The country integrated the public day care facilities and preschools for children between the ages of 0-6 into its education system of elementary and secondary schools since 1985. The 1988 constitution formally declared early childhood education to be a "right" and is a "duty of the State and family." While the Brazilian public education system was before solely responsible for the children above 7 years old; since 1996, the early childhood along with elementary education have become a municipal responsibility with the constitution requiring that a minimum 25 percent of the budget be spent on education.

The major strengths were laid out by the Brazilian Living Standards Measurement Survey conducted by the World Bank and the Institute of Applied Economics Research (IPEA), which covers about 20,000 citizens in 5,000 households. Early childhood education in Brazil has a positive impact on the average years of schooling, future employment and earnings, and nutritional status. First, it was found that one additional year of preschool increased the ultimately attained schooling by half a year. A second positive impact on schooling outcome was that preschool education reduced the repetition rates, with each additional year of preschool amounted a reduction of 3 to 5 percentage points in grade repetition. Third strength was that future earnings of *men* were positively affected by preschool, and the combined direct and indirect effects on income of one year preschool was about 7 percent. Nevertheless, a marginally significant result was not obtained for women, which is a shortcoming of this strength and will be covered later in this paper as a challenge. Fourth, the return on investment (benefit/cost ratio) was calculated to be 2, which seems to be a significant number especially for many industrial and agricultural projects. As Kemmerer asserts (1994, p. 22), a rate of return analysis “is a form of cost-benefit analysis that requires information on both the public and private costs of schooling of different qualities, types, and levels and the benefits of schooling as measured by lifetime earnings.” And finally, the willingness to pay for a year of preschool was about R\$900-R\$1,600 which was remarkably higher than the estimated cost of R\$480 for a year of preschool. This final finding also constitutes a paradoxical weakness as it will be covered in a detailed fashion in the next section.

### **III. Weaknesses and Challenges**

1. All of the Brazilian children have the same (free) constitutional access to preschool education. Nonetheless, since roughly half of the affluent families’ children attend public preschool facilities, the rich receives a disproportionate educational share from the pie. The access to preschool services is minimal for poor families’ children who are disproportionately represented in ECD enrollments. Thus, there is a need to reallocate the funds for poorer children so as to increase their enrollments and provide

educational equity. While only 24 percent of children from the poorest 40 percent attend day care and preschool, the richest 10 percent of the population sends 56 percent of their children to these services.

As of 1995, the total public spending for ECD services was about R\$1.9 billion on children ages 0-6 and the estimated figure for the number of children benefiting from these services was approximately 4.4 million. As a result, the yearly cost for providing preschool education was estimated to be R\$445 per student. Adding the R\$35 private cost that to be incurred by the parents for expenditures such as uniforms, books, and transportation, the total cost per child was calculated as R\$480, a much lower amount compared with the willingness to pay for a year of preschool which was about R\$900-R\$1,600. Based on a discount rate of 10 percent, the range for willingness to pay was found by the calculation in terms of the present value of the income derived from a year of attending preschool in comparison to the income derived without preschool. The challenge is that, though the authorities have the chance of charging wealthier families higher fees for preschool services and therefore subsidizing poor ones more, they reinforce inequality by providing free (or almost free) access to all the families ignoring their economical status.

**2.** Regional differences are significant and cause an asymmetric educational improvement across the country. Enrollments are lower in the Midwest, South, and North and in all the rural areas compared with Northeast and Southeast regions.

Two concrete examples are the case of Sao Paulo, a wealthy state, which accounts for 75 percent of public expenditure on early childhood services with a mere 0-6 age group population of 12 percent; and the poorer state of Bahia, which has roughly the same population of 0-6 year olds, but receiving only 3 percent of public expenditure on these services.

**3.** An approximate of 5.7 percent of Brazilians under age 5 are malnourished. While the effects of malnutrition are critical for children between the ages of 0-6, only 13 percent of school feeding budget was allocated for them. The sector assessment reveals that malnutrition from gestation to age 6 has a deleterious effect on brain development, citing Martorell (1997). Also cited in the very publication of World Bank (p. 22), a study of Sternberg, Grigorenko, and Nokes (1997, p.113) notes that “ill health

during childhood, caused by undernutrition, infection, or environmental toxins, can adversely affect cognitive development,” and reaches the conclusion that “delay in suitable interventions only can result in millions of children with cognitive skills that function at levels well below the children's potential.” Thus, a policy intervention should be considered to reduce the effects of malnutrition for preschoolers, 0-3 age group at the least, for which low-cost alternatives exist.

4. As covered previously, the future earnings of males are positively affected by preschool education in Brazil. However, the Brazilian study shows that an additional preschool year has no significant effect on women's income in the future, which is a matter of social inequality and seems to be out of the scope of this paper. Nonetheless, the fact that an added preschool year does not have a remarkable impact on future earnings of females might encourage the probable vulnerability of those families who choose not to send their female children to school. At the very least, it might weaken one of the serious arguments of policy makers to convince these families, mostly from poor background, with the irresistible attractiveness of increased wealth in the future. Reimers (2000, p.69) points out that poor parents may choose not to enroll their children in school if they think that “what will be learned there will be of no use to the children.” Having said that, starting from the preschool, the girls' education is not only critical in terms of monetary benefits. Apart from the economic independence, it has also significant impacts on social level, such as delayed marriage, family planning, and work (World Bank, 2002).

#### **IV. Policy Recommendations**

1. The first policy recommendation in the sector assessment is the access of the poor and the need to prioritize the locations of preschool services. Warwick and Reimers (1995) suggest that in order to provide learning opportunities, the first condition is access and schools have to be available to all children and located close enough to their homes so that students can walk to school. This is a very fair approach from the stand point of both access and equity. Early intervention to overcome the educational inequalities is a must. As being a country with one of the highest income distribution disparities around the globe, the reflection of this inequality problem in Brazil starts even during the preprimary schooling

and we know that “education has the greatest correlation with both income inequality and the probability of being poor” and “most income inequality is related to educational inequality” (Reimers, September 23, 2005, lecture notes).

I argue that addressing this issue is critical in the sense that current structure of preschooling favors rich and it exacerbates the high educational gap between the children of families with different economical backgrounds. In order to provide equal outcomes in terms of social and cultural options in life, the equality of inputs and processes should first be realized (Reimers, September 23, 2005, lecture notes).

**2.** Second, to increase enrollments and efficiency, preschool finances need to be strengthened. While there is a willingness to pay for preschool with a maximum amount of R\$1,600, some not-so-poor families only pay R\$50, for example in the Northeast; so, a better fee structure is needed for the demand. This will certainly improve the financing of ECD services without additional budgetary spendings. A good example can be the case of New Zealand which provided public ECD support to the individual child. New Zealand authorities found voucher plans expensive and requiring too much government oversight, and incorporated block grants to preschool providers who, in turn, would use it as a per child cost for each low-income child enrolled (World Bank, 2001).

The above situation worsens the already disproportionate allocation of educational resources and reduces the effectiveness of preschool spendings. Indeed, I argue that one of the reasons why the current structure favors the rich families’ children is the misuse of scarce resources.

**3.** Finally, there is a need for combining preschool with other ECD services; that is interventions for 0-3 age group, who are mostly cared at home, can be helpful with health programs and training of parents, mothers in particular. Nonformal ECD services, through home visits, day-care centers, training, and literacy centers, have been low-cost alternatives to formal public preschools. They are estimated to affect more than a million children and are critical means for using low-cost alternatives for public preschools. While this is an encouraging step toward improving preschool services in Brazil, more research is

required for a comprehensive strategy, as the sector assessment itself mentions because of a lack of a systemic framework.

The policy recommendation on nonformal ECD services is critical. According to Reimers (2000), since poor families have less income and material commodities for their health, their children are prepared for school at a lower extent. Husen (1972, cited in Reimers, 2000) called these conditions as “initial inequalities.” I believe that the policy of intervening for 0-3 age group is correctly addressing one of the main issues laid out in the sector assessment and is supported by the suggestion of Myers (2000, cited in Reimers, 2000) that “hungry, sick, and malnourished children do not learn well.”

## V. Conclusion

Expanding and improving early childhood care and education, especially for the most vulnerable and disadvantaged children is one of six goals of UNESCO’s Education for All (EFA) (UNESCO, 2003). Brazil has been aware of the distinction of preschool education for the last two decades when the country included the public day care facilities and preschools for children between the ages of 0-6 in its education system in 1985. In addition, since 1996, the early childhood along with elementary education have become a municipal responsibility with a constitutional requirement of allocating a minimum 25 percent of the budget on education.

The Brazilian study on preschooling lays out that early childhood education has a positive impact on the average years of schooling, future employment and earnings, and nutritional status. However, in order to attain educational equality, more focus is needed to provide ECD services to children out of the favored categories, who are older, richer, live in the urban areas and have better educated parents (preschool enrollment is higher among the older children. 51 percent of 4-6 year olds attended preschool programs while a mere 8 percent of 0-3 age group was enrolled. The latter figure, which is low in comparison with OECD nations, is parallel to Latin American states). Our previous knowledge reminds us that “the concentration of assets (including education) and of income diminishes the impact of growth

on the poor” and on the other hand, “reduction of inequality would impact poverty just as fast.” (Reimers, October 3, 2005, lecture notes)

The high disparity between the income levels of rich and poor is a serious burden in Brazil; yet it is reinforced starting from the early years of schooling because of the uneven distribution of resources to the rich and to the poor. With a similar population for the age group of 0-6, Sao Paulo accounts for 75 percent of public expenditure on early childhood services while Bahia receives only 3 percent. Reimers (2000) goes further and argues that it is unlikely to close the gap between the rich and the poor by providing the same educational environments. Brazil cannot even provide equal opportunities.

The cost per child for ECD services is roughly R\$480, in spite of the fact that the willingness to pay for a year of preschool is at the range of R\$900-R\$1,600. Since the whole population have the same (free) constitutional access to preschool education, rich families disproportionately use the educational budget to their favor. A new fee structure, for rich at the very least, is needed because the rich families are currently subsidized at the expense of poors’ equity and access to preschool educational services. New Zealand case can be a constructive model where public ECD support is provided to the individual child.

The final part of the policy recommendations is the need for combining preschool with other ECD services, namely for 0-3 age group. These children are mostly cared at home and interventions can be helpful with health programs and training of parents, especially mothers. Nonformal ECD services, affecting more than a million children, is important for using low-cost alternatives for public preschools.

Brazil’s public spending on preprimary education tends to be lower relatively against other countries with development similarities. In 1999, per child spending at preschool in Argentina was almost a double of Brazil’s (World Bank, 2001). With its volatile political and economic structure, Brazil needs to invest on education more than it does today with a better effectiveness of spending. Investing on education proves to affect the lives of children across the globe, and its management and administration possess long-term consequences not only for economic growth, but also for social health and political stability (Reimers & McGinn, 1997), all of which are most needed in Latin America.

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