THE INVISIBLES
— Girls and Boys ages 0 to 6 years old —
Executive Summary
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The Invisibles. Girls and Boys ages 0 to 6 years old: 
State of education in Mexico 2014.
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permission from the author.
1. Ending invisibility

By:

David Calderón, Mexicanos Primero.

The world over, there is a growing awareness that the first years of life are crucial for the adequate development of every person, and that vigorous and coordinated action can mitigate inequalities and injustices if every society commits itself decisively to caring for its members from their earliest infancy.

This effort by Mexicanos Primero is an initial step aimed at enriching the social dialogue and the incidence in public policies in the direction of full life. It is not our intention to push the limits of expert knowledge. Instead, we want to contribute to place in the public agenda the need and the urgency of working for early childhood development; spread evidence and useful information, call attention to adequate and relevant practices, and point out promising examples. We want to summon citizens already active in this field, motivate the undecided, favor coordination and collaboration between experts in different disciplines, and offer proposals for policymakers. We also want to supply tools for parents’ demands and involvement, establish monitoring of key indicators and of compliance with the current norms, and advocate for establishing goals and following up proposals. We want to place in the public conscience that every Mexican has the right to learn from day one of their lives.

Obviously, the end point of six years of age is a conventional term for defining the stage to which we will dedicate ourselves. This is the stage we want to extract from invisibility, in relation to the so-called “school age,” whose institutions are highly visible. In this book, in an interchangeable fashion, we will define as “early” or “initial” that arc of time that leads up to six years of age. We will consider development in its broadest definition, involving the physical, health, cognitive, socio-emotional, community, and specific cultural identification.

Early childhood has the peculiarity that the phase of maximum construction of our human potential coincides with the phase of maximum vulnerability. The time of our lives with the most explosive growth coincides with the most extreme dependency on others. If because they are small we assign only “a little” of our social effort, of our public budget, of our institutional capacity, then it is we adults who are delayed and stunted. A society’s level of civilization can be measured not by its technological development or its availability of monetary wealth, but by the quality of the care and learning opportunities it offers to its youngsters.

We hope that by the end of this work, we will have outlined what we can all do, each according to her responsibility and contribution to the solutions. We owe it to the girls and the boys to begin early, to being now. Our farsightedness could become blindness, or on the contrary, correct itself to gain clear and long-term clarity. The time has come for little girls and boys to be invisible no more: let’s look at them.
2. Neurobiology of development in early childhood. Foundation for a sustainable society

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Building a strong foundation for a healthy development during the early years of life is an important prerequisite for individual wellbeing, economic productivity, successful communities and harmonious civil societies. Stated simply, a promising future belongs to those nations that invest wisely in their youngest citizens. To do this, it is critical to understand a set of core principles that guide the process of early development in order to utilize this scientific knowledge base effectively as a framework for developing stronger policies and programs.

**Core Concepts of Early Development**

Brains are built over time and a substantial proportion is constructed during the early years of life. The brain’s architecture is built over a succession of “sensitive periods” each of which is associated with the formation of specific circuits that are associated with specific abilities. A strong foundation in the early years increases the probability of positive outcomes and a weak foundation increases the odds of later difficulties.

Early childhood development is influenced by genetics and experience. Genes determine when specific brain circuits are formed and experiences shape their formation. Children’s experiences with all of the people who are important to them have an influence on their brains’ structure and function. These relationships begin in the family but often also involve other adults who play important roles in their lives.

Cognitive, emotional, and social capacities are inextricably intertwined, and learning, behavior, and both physical and mental health are highly inter-related over the life course. All our human capabilities are developed through a process that is simultaneous and deeply inter-connected. The emotional health, social skills, and cognitive/linguistic capacities that emerge in the early years are all important prerequisites for success in school and later in the workplace and community.

Toxic stress in the early years can damage the developing brain and other organ systems and lead to lifelong problems in learning and social relationships as well as increased susceptibility to illness. When a young child’s stress response systems are activated within an environment of supportive relationships with adults, these physiological effects are buffered by adaptive coping responses and restored to baseline levels, which leads to the development of healthy stress management capacities over time. However, if activation of the stress response system is excessive and long-lasting, and protective relationships are unavailable to the child, then developing brain circuits can be disrupted and other physiological systems (e.g., cardiovascular and immune function) can be impaired, with lifelong repercussions.

Brain plasticity and the ability to change behavior decrease over time. Although “windows of opportunity” for skill development and behavioral adaptation can remain open for many years, trying to change behavior or build new skills on a foundation of brain
circuits that were not wired properly when they were first formed requires more work and is more expensive.

**Impacts of Early Adversity**

The link between significant adversity in childhood and increasing risk for later disorders in physical and mental health has been documented extensively. Children who grow up in families or communities of low socioeconomic status also appear to be particularly vulnerable to the biological embedding of disease risk and other developmental disruptions. Children who have been neglected, abused, or malnourished are more likely to have heart disease as adults. They are also at greater risk for a variety of health-threatening behaviors such as smoking and substance abuse, as well as depression and anxiety disorders. Early and repeated exposure to adversity can also lead to emotional problems, as well as compromised working memory, decreased cognitive flexibility, and poor self control that can have negative effects on learning and school readiness.

**Strategies for promoting the healthy development of children and for breaking the vicious circle of adversity and low development**

This rapidly growing scientific knowledge suggests new strategies for enhancing the healthy development of young children by reducing the disruptive effects of significant adversity on developing biological systems. The following model includes four interrelated dimensions that can be used to inform more effective early childhood investments: (1) the biology of health; (2) the foundations of healthy development that promote biological adaptation; (3) caregiver and community capacities that strengthen the foundations; and (4) public and private sector policies and programs that enhance caregiver and community capacities (see Figure 2.1).

This strategic approach to communicating about early development, combined with the integrated, science-based framework presented in this chapter, offers a new way to conceptualize policies and practices that address the early childhood origins of lifelong health and development across multiple sectors.

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**Figure 2.1. Model for Lifelong Health**

Settings

- Workplace
- Programs
- Neighborhood
- Home

Policy and Program Levers for Innovation
- Primary Health Care
- Public Health
- Child Care and Early Education
- Child Protection and Social Welfare
- Economic and Community Development
- Private Sector Actions

Caregiver and Community Capacities
- Time and Commitment
- Financial, Psychological and Institutional Resources
- Skills and Knowledge

Foundations of Health
- Stable, Responsive Relationships
- Safe, Supportive Environments
- Appropriate Nutrition

Biology of Health
- Physiological Adaptations or Disruptions
- Cumulative Over Time
- Embedded During Sensitive Periods

Workplace Programs Neighborhood Home

Preconception Prenatal Adolescence Early Childhood Middle Childhood Adulthood

Health and Development Across the Lifespan

Source: Adapted from Center on the Developing Child at Harvard University (2010). The Foundations of Lifelong Health are Built in Early Childhood.
Social mobility and early interventions

It has traditionally been said that education is the driving force behind social mobility. Mexico has experienced absolute improvements in education. However, achievement at the high school and college levels is still conditioned by family background. To break this inertia, basic and high school education quality must increase.

A more effective way of overcoming issues related to low social mobility is through early intervention. The State intervenes at different points in an individual’s life, but interventions in the early stages of life yield the highest returns. This is due to their structural nature rather than a remedial one. Interventions targeting newborns and young children can have very positive effects on their earnings and social mobility potential in adulthood, especially in children who live in vulnerable situations. Early interventions are preventive policies.

Social mobility is one of the most important issues concerning social development. In general, social mobility refers to the changes individuals undergo in their socioeconomic status. A society that faces low social mobility and income inequalities, can greatly sever possibilities of future economic development of its members. Mexico is characterized by the concentration of low social mobility at the opposing ends of the socioeconomic distribution, where, moreover, the lower end is made up of population living in extreme poverty.

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Social mobility and early interventions

| THE INVISIBLES | GIRLS AND BOYS FROM 0 TO 6 YEARS OF AGE |
The past 10 years, different Latin-American countries have witnessed an important increase in the workforce participation of women. Between 1990 and 2011, Brazil has increased its rate of participation by 23%, Mexico by 14% and Chile by 12%. A greater participation of women in the workforce brings many benefits: greater equality of opportunities between genders at home and in the workplace, and also growth and development of a country.

However, many women continue to face difficulties for entering the labor market. One of the most important restrictions is the cost associated with caring for their children, especially the youngest ones. In Mexico, during 2009, approximately 80% of children under 6 years of age were cared for by their mother. This suggests reduced access to both private and public child care centers. For the average family, it is too expensive to pay for private child care.

The academic literature is not conclusive about whether it is better to care for one’s own children or to leave them at a day care. The result seems to depend on the type of care that children receive at home: if it is very good, young children are probably better off being cared for by their mother or another family member, if it is not that good, they are probably better off in a high quality child care center. We do know that child care centers of adequate quality can generate lasting benefits in society, through the development of children’s cognition and personality.

The Mexican government offers child care services mainly through the Institute for Social Security and Services for State Workers (ISSSTE, in Spanish), the Mexican Institute of Social Security (IMSS, in Spanish) and the Program of Nurseries in Support of Working Mothers (Estancias Infantiles, EI). There is no published research evaluating the impact of the IMSS’s day care centers. In the case of Estancias Infantiles, a recent study found that women who used them increased their workforce participation and their incomes. Another study found that though children that attended Estancias Infantiles got sick more often than those who did not attend, they also had better communication outcomes, a more diversified diet, and better behavior at individual and social levels (provided they were at the center for at least 6 months).

It is likely that many mothers would not work outside the home even with a child care subsidy, either because they prefer to personally care for their children or because the labor market cannot offer them a sufficiently high salary. However, there are many women in Mexico who might want to work outside the home if they had sufficient resources to pay for quality child care or if they had access to subsidized day cares. Not having access to this kind of public services is an important restriction for female workforce participation.
Public spending is one of the principal instruments of public policy in democratic societies. In the case of early childhood, the use (or not) of public resources exemplifies the State’s commitment to guaranteeing the right of our youngest population to education, understood as the right to learn and to develop fully. From 1998 to the present, investment in early childhood in Mexico, as a percentage of Gross Domestic Product (GDP), has increased, though it remains below the international average. This increase has been less than half of the growth seen in countries like the United Kingdom, South Korea, and Chile.

Despite this improvement in public spending on early childhood in recent years, the absolute level of spending in Mexico remains low. In 2009, Mexico spent a total of 6,589 dollars (PPP) per child ages in the first five years of her life (in education, child care and transfers, does not include health). This amount is the lowest among the countries of the Organization for Economic Co-operation and Development (OECD). In comparison, Chile, Poland, and South Korea, spent between double and triple that amount. Moreover, their spending was higher not just in absolute terms, but also relative to their GDP.

Furthermore, if we consider public spending on early childhood relative to spending on middle or late childhood, the tendency is to channel fewer funds to the youngest girls and boys. Within the early childhood stage, there is a second, worrying trend: the lack of significant investment during the first three years of life. Spending on girls and boys under three represents only 14% of total early childhood expenditures. In fact, the sum of what is spent per child during their first three years of life, does not even reach half of the annual expenditures on a four or five year-old child.

Early childhood spending can take various forms and be applied to various areas of girls and boys’ lives. In Mexico, early childhood spending is mostly directed toward the right to survival (i.e. health, nutrition and social assistance). This is particularly true in the case of spending on girls and boys under three, where the bias toward social assistance instead of holistic development is a red flag.

As outlined in our study (Mis)Spent, the proposal of Mexicanos Primero is not simply to spend more, but also to invest our resources better. In Mexico we have the need as well as the opportunity to promote good spending on early childhood that will support the right of our youngest population to full development.
or many children, particularly those living in vulnerable conditions, State support through programs and public services to promote early childhood development (ECD) is key to help them achieve their fullest potential. In Mexico there is a plethora of programs for health, education, and poverty relief whose goal is to promote key aspects of child development. Most of the programs focus on prevention, detection, and attention to illnesses and on reducing mother and child mortality. Other programs focus on strengthening the skills of parents and/or caregivers and of their communities. Despite this diversity in public programming, several ECD indicators suggest that much remains to be done:

- 18% of children younger than one year do not have a birth registry. In Chiapas this figure is 44%, in Guerrero 40%, in Morelos and Oaxaca 36%, and in Veracruz 23%.
- Only 14% of infants under six months are fed exclusively with breast milk (what is recommended by the World Health Organization).
- One in five children (close to 26%) is at risk for developing a disability (National Health and Nutrition Survey [ENSANUT], 2012).
- 16% of children younger than 5 years, lives in overcrowding conditions. Poverty and overcrowding are strongly related to child mistreatment and abuse.
- 38% of children younger than 2 years has anemia. When anemia is not cured before children are 2 years old, it causes irreversible damage to motor and intellectual development.

The public offering of ECD programs has important gaps. There are few programs or sub-programs (other than Piso Firme, a program to provide cement floors in dwellings) specifically dedicated to
developing safe living surroundings for children, as well as safe parks and recreation for young children. There are few programs whose main objective is to improve the environment of personal relationships surrounding the child. Moreover, we did not find programs whose specific goal was to attend to the mental health of parents and caregivers, though it has been widely documented that good mental health in adults is related to healthy development in children. Existing programs, such as child care centers and early education, have low coverage, meaning that they provide insufficient access to all the people that could benefit from them.

Furthermore, we still know little about the quality or impact of early childhood development programs in Mexico. There is a widespread lack of indicators of quality in the service provision. The great majority of the public and private programs that promote ECD has not been evaluated for their impact or studied in a way that can improve their implementation (if such evaluations exist, they have not been made public). We do know that some programs, such as those for nutritional assistance and poverty relief (conditional cash transfers), as well as vaccination campaigns have significant benefits on the nutritional and health status of children as well as on access to preventive health care services. Some child care and initial education programs have also been found to benefit, albeit moderately, children's development.

Views and Slants in the Policy for Early Childhood Development

Many of the gaps identified, either in program offerings or in indicators and data, may be caused by slants or biases in ECD public policy design. Based on the work by Robert Myers and his collaborators we have identified slants in DIT policies related to the following views:

- A direct link between DIT policies and formal, salaried employment.
- Emphasis on curing and preventing diseases.
- A centralized focus, with little involvement of state and municipal levels.
- Lack of mechanisms and indicators to ensure the quality of service provision.
- Low priority of early education and stimulation for children between 0-3 years.
- Lack of integrating policies and coordination.

Challenges in access and quality

Some programs and services to promote adequate ECD have low or insufficient coverage, particularly those tied to social security benefits (which according to a recent study by the Interamerican Development Bank [IDB] are also of higher quality). Only 6% of children under 3 years of age attend child care centers (of any kind), compared with the 31% OECD average. Coverage of IMSS' day care centers is around 21%.

According to data from the National Occupation and Employment Survey (ENOE) 2009, 75% of mothers of children aged 1-4, did not have access to social security benefits (among low income mothers, those earning fewer than 6 minimum salaries, this figure rises to 91%). This means that the vast majority of new mothers will not receive employment benefits. However, even among mothers with social security, many do not qualify to obtain services. For example, according to the National Employment and Social Security Survey of 2013, fewer than half of working mothers with access to social security benefits who gave birth that year, received paid maternity leave.

As for services for uninsured populations (i.e. those without access to employer-supported social security) coverage is also low, despite a recent expansion of these services. Coverage for the Estancias Infantiles (day cares) program was only 29%, and for CONAFE's early education program PEI, coverage was around 31%. This means that the great majority of young children in our country,
even those that are eligible to receive public services, do not participate in child care or early education programs. In the health sector, even though there have been important improvements in access to preventive healthcare, many challenges remain to ensure young children attend healthy-child check-ups and receive health care.

There is much yet to do to ensure quality of ECD service delivery. In 2014, five years after the tragedy of the “ABC” day care in Hermosillo, Sonora, **13% of the child care centers in the nation do not comply with current regulations.** In addition, the models of decentralized provision of services to the uninsured population in rural areas continue to face important challenges to ensure a uniform standard of service quality.

**Building a better system of attention for the youngest children**

The result of this fragmented public system of attention to early childhood is a difficult process for families to navigate. Effective and timely attention to children requires that governmental offices at all levels share information, resources, and lessons learned. It requires that they integrate registries and generate data that allow for evaluation and monitoring of the different initiatives.

**A Development, Health, and Nutrition Card could serve as an instrument to coordinate different services and approaches.** This card could become part of the National Vaccination Card to allow for a timely follow up and diagnostic of potential issues, besides serving as information material for parents and families.

**To accomplish this and other coordination efforts, early childhood needs a home at the highest level.** Other countries have implemented successful reforms to tend to the youngest children, particularly those living in vulnerable situations. They have accomplished this through national policies coordinated at the Presidential level. **Chile is a notable case with its System of Comprehensive Protection for Early Childhood “Chile Crece Contigo” (Chile Grows with You), but there are others such as Colombia (“De Cero a Siempre” or From Zero to Forever) and Jamaica (Early Childhood Programme). In Mexico, there does not exist an entity that houses early childhood, at the highest government level.**
The first five years of life are critical in the lives of human beings. This period establishes the groundwork that will allow them, in the future, to possess the tools that will help them profit from the education they receive, develop effective communication, establish and maintain adequate interpersonal relationships, and achieve the development of skills and abilities that will allow them to reach their maximum potential.

In Mexico, efforts of diagnostic evaluation for childhood neurodevelopment are still incipient. An adequate evaluation and diagnosis of the process of childhood development is of the utmost importance, since it enables knowing and quantifying the level of maturity reached by a child in comparison with his age group and, in this way, the implementation of preventive and remedial actions. Within the diagnosis process the administration of assessments is a central element that allows for characterization of the illness and for directing its treatment, besides making possible specific counseling on the basis of opportunity areas identified for each child.

One of the most important efforts in the field of child development assessment in recent years is the development and administration of the Evaluación de Desarrollo Infantil (Childhood Development Assessment) or EDI. The EDI assessment tool evaluates in a simple way the main development areas (gross motor, fine motor, language, social-adaptive, and knowledge). Trained health personnel (doctors, nurses, and health aides) ask parents a series of questions and observe children to evaluate each of these areas. EDI looks for risk signals which if present, automatically identify a child at risk of developmental delays, who is in need of further testing. EDI is designed for children younger than 5 years of age, takes between 10 and 15 minutes to administer, and is intended to be included as part of healthy-child check-ups.

The results of the EDI test suggest that a significant proportion of children under 5 years of age in Mexico show signs of developmental delay for their age in several areas, especially in the areas of language and cognitive development. Up to 20% of the children in assessed samples in the states of Coahuila and Guanajuato show signs of developmental delay either moderate or serious. Assessed samples are not random, and in some states contain only beneficiaries of the conditional cash transfer program Oportunidades (Coahuila), and in others a combination of beneficiaries of social assistance programs and uninsured populations. Therefore, though these results cannot be considered representative of the entire population, they do suggest concerns about developmental risks in an important segment of children. These risks can be resolved, for the most part, with adequate and timely medical intervention as well as family attention.

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Nutrition as a pillar of health and development

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Nutrition is one of the pillars of health and development. A good nutrition in people of all ages fortifies the immune system, reduces the risk of contracting disease, and leads to more robust health. In the case of preschool children, nutrition plays a key role in their growth and development. This period of development begins before conception with the nutritional status of the mother immediately before pregnancy.

Mexico faces enormous challenges in the field of child nutrition; malnutrition, iron-deficiency anemia, overweight, and obesity are the main nutritional issues affecting children, along with the decrease in the rate of breastfeeding. These issues place the wellbeing and development of children under the age of 5 at risk. Several indicators reveal the magnitude of the problem:

- 10% of children under the age of 5 is overweight.
- Only 14% of infants under 6 months of age are fed exclusively on breast-milk (as recommended by the WHO).

Breast milk is an effective tool against malnutrition and excessive weight gain. However, breastfeeding has shown an important decline in Mexico since the year 2006.

There are stages in life in which ensuring good nutrition is of primordial importance, since the damage generated by malnutrition can be irreversible. Today we know that the period between pregnancy and two years of age presents

- 13.6% of children under the age of six has chronic malnutrition. The presence of chronic malnutrition in children under five years of age is still four times greater than the expected prevalence for Mexico, according to World Health Organization (WHO) guidelines.
- The southern region comprised of states like Chiapas, Guerrero, Oaxaca, and Yucatán has shown the highest prevalence of chronic malnutrition for the past 24 years. Among indigenous children, almost one in every three has chronic malnutrition.
- Also, anemia is present in 23.3% of children under 5, especially affecting the group of 12 to 23 months of age.
The importance of parents and family environment

7.3 Early childhood development: The importance of parents and the family environment

The greatest risk for the appearance of growth disorders, micronutrient deficiency, and common childhood illnesses. After a child reaches two years of age, it is difficult to revert growth deficiencies (leading to stunting). Infectious diseases, such as pneumonia and diarrhea, common in children with malnutrition, increase their risk of death. Moreover, it is also known that the risk of mortality increases when adequate breastfeeding practices are not established, particularly exclusive breastfeeding during the first six months of life.

Promoting breastfeeding, and adequate complimentary nutrition, supplementing with vitamin A and zinc, and the adequate treatment of severe malnutrition are the most promising interventions for reducing child mortality and the future burden of diseases related to malnutrition. The context surrounding children can also be a favorable influence for reducing the damage done. Even for malnourished children, stimulation provided at home can greatly benefit psychomotor development. Consequently, it is necessary to develop strategies to promote early stimulation within the home and the community, as part of the tools for improving childhood health.

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Elements such as secure attachment, child rearing practices, and emotional stability of the mother are key to support physical and mental wellbeing of families.

- A healthy and secure attachment is the result of having at least one adult figure (paternal or maternal) capable of offering emotional containment that supports self-regulation and that takes into account a baby’s needs and desires from the moment of birth. Secure attachment strengthens tolerance to frustration, work habits, and eases the transition to formal schooling.
- There is a close relationship between cognitive and socio-emotional development with the type of patterns of parental conduct and
child-rearing practices. These include facilitating learning opportunities ad hoc to the child’s age, human warmth, and support responses, and facilitating autonomy, exploration, and learning in a context of discipline as well as informed and responsible decisionmaking.

• The mother’s emotional stability is a key factor that requires attention even before the birth of the baby. The psychosocial conditions in which pregnancy occurs, and the very care and preparation for being a mother are associated with the quality of the relationship between mother and baby. This will have repercussions in the mother’s capability for being sensitive to the needs of her baby and of responding to its needs.

Child neglect and mistreatment

The Index of Mexican Children’s Rights (2012), published by CEIDAS A.C., which measures the degree of compliance with the rights of boys and girls aged 0-4, reports that Mexico is a country not suitable for children. On a scale of 1 to 10, Mexico received a grade of 5 for the little respect it shows for children’s rights, among them the right to a life free of violence. Domestic violence, an occurrence in many Mexican households, inhibits secure attachment among parents and babies as well as adequate child development. Unfortunately, violence against children from age 0 to 4 is high. According to the few statistics available, every two days a child of less than four years of age is a victim of homicide.

Breaking the intergenerational cycle of parenting styles

Humans tend to repeat the models of child rearing learned in their childhoods, and even defend them with statements like “that’s how it was at home.” Styles of parenting may include disinformation on the capabilities of the newborn, as well as a great number of limiting beliefs related to gender roles, the capabilities of men and women, beliefs about psychomotor development or about the type of stimulation that boys and girls need, parenting practices related to discipline, teaching methods, management of limits through menaces and the expression of affection, among others.

Understanding that not everything received at home is ideal, requires a capacity for introspection and a process of self-reflection that may be damaged if one had a chaotic childhood. However, through programs aimed at changing knowledge, attitudes, abilities and social norms and behaviors, it is possible to change traditional and modern parenting models that do not favor the desired advancement in the child. The potential for
The critical window of the first 1,000 days

education in promoting positive parenting styles from early on is key to raise healthy, productive, happy children. Parenting programs, especially those that favor personal parent development as well as the mother-child relationship, must begin with pregnancy and even before, fostering actions centered on mental health in all the stages of life.

The critical window of the 1,000 days: Early education and child care

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The first three years in the life of a child represent a crucial stage for achieving its maximum physical, socio-emotional, and cognitive development. Learning begins from the moment we are born. Intelligence is not a fixed attribute, but an ability that is malleable and sensitive to intervention. A child that begins her life with adequate levels of stimulation will have greater opportunities in the future. The richer the environment in which a child develops, the more positive connections are established in his brain, leading to better physical and social skills, in addition to her capacity for expression, reasoning and acquiring knowledge.

Many children living in poverty have an unfortunate start in life and lack the opportunities for learning, protection, and affection required to develop to their fullest potential. In Mexico, there is research that suggest that poor rural children aged 2-5 exhibit low levels of cognitive development, in terms of short and medium term memory, visual integration, and vocabulary.

As time goes by, the results of having begun life in conditions of poverty gradually become greater obstacles. Evidence from other countries suggests that children of both high and low income levels obtain similar results in cognitive tests at age 3. However, by age 5 the gap has widened considerably (see Figure 7.4.1). For children from disadvantaged backgrounds, the first day of primary school may already be too late in terms of avoiding poor performance, repetition, and even dropping out of school.

Programs for attention to children 0 to 3 years of age in Mexico

The stock of public programs tending to children younger than 3 is not enough to meet its potential demand. According to data from the 2010 Census, barely 12% of the population of children in this age range (the potential demand) benefits from public services (child care centers, early education, etc.). Coverage for IMSS’ day care services in 2012, was around 21%, while the Estancias Infantiles day care program run by SEDESOL covered 29% of its potential demand in 2012. This

7.4

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means that a little over 70% of potential beneficiaries or eligible people for these kinds of programs either cannot or do not want to access their services.

Regarding impact, there is little evidence documenting the effects of these programs. A review of the available research suggests that:

- **Beneficiaries of the services of the early education program PEI, offered by CONAFE, have positive perceptions about the effects the program has on child development and positive child rearing practices.** An impact evaluation found that, on the average, participating parents did carry out more early stimulation activities than non-participating adults. Those activities did seem to have benefits over several development indicators for children aged 0-18 months, although not for children aged 3-5 years.

- The *Estancias Infantiles* program of SEDESOL has had positive effects on the mothers’ employment and, consequently, on their family incomes. An evaluation carried out by the National Institute of Public Health (INS) and others, observed modest positive effects on development indicators in the children, as long as children received the service for at least 6 months.

It is worrisome that we know little about the quality of the services aimed at our youngest children. The recent report from the National Council suggests that, five years after the tragedy at the “ABC” day care center, important differences persist in the standards of child care service delivery. Given the enormous challenge in terms of inequalities in the access to childcare services, a multi-sectorial strategy is required to target services better, as well as strengthen the education component (not necessarily through formal schools) of programs directed toward children.

**Figure 7.4.1. Socio-economic differences related to vocabulary for children between 36 and 72 months of age in Ecuador**

The age between 3 and 5 years represents another window of opportunity in terms of children’s capacity for acquiring increasingly complex cognitive, social, and linguistic skills. In this second stage of school readiness, children benefit tremendously from learning environments that require more frequent and prolonged interactions with other children and adults.

In the last decades, preparing children for school has acquired worldwide relevance as a public policy. A weighty factor has been the increasing international evidence on the influence that initial preparation eventually has on their academic success and adult lives. A child is ready for school when he has fully developed (according to his age) in four dimensions:

1. Physical and motor development
2. Cognitive development;
3. Linguistic development; and
4. Emotional and social development.

Preschool education is considered indispensable for preparing children for school, since it constitutes a transition between home and school, and builds the foundations for future educational attainment. In Mexico, preschool for children aged 3-5 is mandatory. It is offered in one of three formal service provision modes: general preschool, indigenous preschool and Centers for Childhood Development (CENDI). Additionally, it is offered in one non-formal schooling mode: community preschools operated by CONAFE. Most children attend general preschools (85%), followed by indigenous preschools (9%), and CONAFE’s community preschool courses (4%). Only 1% attend CENDI preschools.

The global coverage (3, 4, and 5 years of age) of preschool in Mexico is almost 80%, though it differs by ages. Coverage for 3-year olds is only around 40%. Average preschool coverage for ages 3-5 has increased considerably in the past few years. This improvement, however, has not been uniform across the country: average coverage for marginal and very marginal (i.e. poor) municipalities is 57% while coverage for non-marginal communities is around 94% (see Figure 7.5.2).

The inequities that are present throughout the education system in Mexico are also evident at the preschool level, both in terms of resources as well as outcomes. There is data to suggest that the high increase in the pre-primary educational service access might have been achieved at the cost of educational quality. The number of pupils per teacher in indigenous preschools (24) is much higher than the number in general preschool (19), and private preschools (11). The OECD average is 15 pupils per teacher.

Public preschools have poorer infrastructure conditions than private schools, but among public schools, indigenous and community preschools are worse off than general preschools. On average, indigenous and community preschools have fewer services (electricity, water, sewage) and lower access to communication and technology.
**Figure 7.5.1 Preschool Coverage, %**

![Graph showing preschool coverage percentage over years]

Source: Own elaboration with education statistics from SEP.

**Figure 7.5.2 Number of Students per Teacher, 2013**

![Bar chart showing students per teacher by category]

All of this could be having negative implications on preschool students’ learning. In Mexico preschool children coming from disadvantaged backgrounds are behind in terms of important skills for their future schooling.

The percentage of children that did not attain the basic level in mathematical thinking is 22% for those who attend CONAFE community preschools. This figure stands in stark contrast to only 1% not reaching the basic level in private preschools, and 9% in public, general preschools. Furthermore, a greater percentage of teachers in indigenous and community pre schools, and up to a certain point, rural schools, express beliefs that do not correspond to pedagogical principles guiding the national preschool curriculum implemented in 2004 (PEP, in Spanish).

Decisive action must be taken to increase the coverage and the quality of teaching and learning for all children who have reached preschool age. It is also important to ensure that educators in all the modalities be properly trained and supported so they may adequately follow the principles of good teaching practices for this level. Improvements to preschool infrastructure, equipment, and materials are also needed, particularly in rural and indigenous communities. The relationship between preschools and the families and communities is an issue of primary importance in which there is still much work to be done.
Author:
Lucrecia Santibañez, *Mexicanos Primero*

The stage from the pre-natal period up to 3 years of age is especially critical for children’s development. It is at this stage where the brain is most malleable, where its plasticity is in its maximum state. It is indispensable for the brain to develop adequately at this stage, since it is much easier and effective to build cerebral circuits during the first years of life than to repair them after.

The stage between 3 and 5 years of age is also very important. It is at this stage that children prepare for school and acquire communicative, affective, and thinking skills that will help them advance successfully towards primary school, and successfully continue the remainder of their formal education. Although it is never too late to remedy a turbulent beginning, the bottom line is that a child who does not develop adequately during its first years of life has fewer possibilities of achieving her maximum educational, social and economic potential. In Mexico, many children under six years of age, especially those that live in poverty, are socially invisible. Their rights are not being respected and exercised.

The invisibility of the youngest children borders on the literal

Almost one out of every five babies is not registered and therefore does not officially exist. Furthermore, there is very little information for making them visible. The issues afflicting this population, so important for Mexico’s future, are also invisible.
## TABLE 8.1. EARLY CHILDHOOD IN NUMBERS

<table>
<thead>
<tr>
<th>Mexico</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6%</strong></td>
<td>Children under 6 years of age that are enrolled in a child care center (average OECD 31%)</td>
</tr>
<tr>
<td><strong>18%</strong></td>
<td>Children under 12 months without birth registry (Chiapas 44%, Guerrero 40%, Morelos and Oaxaca 26%, and Veracruz 23%)</td>
</tr>
<tr>
<td><strong>21%</strong></td>
<td>IMSS day care program coverage rate (2012)</td>
</tr>
<tr>
<td><strong>29%</strong></td>
<td>Estancias Infantiles (SEDESOL) day care program coverage rate (2012)</td>
</tr>
<tr>
<td><strong>31%</strong></td>
<td>Coverage rate of CONAFE’s program of community-based early education program for parents (PEI)</td>
</tr>
<tr>
<td><strong>79%</strong></td>
<td>Preschool coverage rate (% of children of relevant age enrolled in preschool)</td>
</tr>
<tr>
<td><strong>24</strong></td>
<td>Number of students per teacher, on average, of indigenous preschools (average OECD = 15)</td>
</tr>
<tr>
<td><strong>40%</strong></td>
<td>Preschool coverage rate for 3-year olds (% of children of relevant age enrolled in preschool)</td>
</tr>
<tr>
<td><strong>57%</strong></td>
<td>Preschool coverage rate for 3-5 year olds in communities classified with high or very high marginalization (in communities of low or very low marginalization = 94%)</td>
</tr>
<tr>
<td><strong>22%</strong></td>
<td>Preschool students aged 5 who score below basic in INEE tests of mathematical thinking in community preschools (national average 9%)</td>
</tr>
<tr>
<td><strong>20%</strong></td>
<td>Preschool students aged 5 who score below basic in INEE tests of language and communication in community preschools (national average 6%)</td>
</tr>
<tr>
<td><strong>25%</strong></td>
<td>Children aged 2-5 years old nationwide who show risk for any disability according to ENSANUT, 2012</td>
</tr>
<tr>
<td><strong>33%</strong></td>
<td>Percentage of indigenous children younger than 5 with chronic malnutrition according to ENSANUT, 2012</td>
</tr>
<tr>
<td><strong>23%</strong></td>
<td>Percentage of indigenous children younger than 5 with anemia according to ENSANUT, 2012</td>
</tr>
<tr>
<td><strong>US $6,589</strong></td>
<td>Average annual cumulative (total) spending per child younger than 6 years (Chile: US $11,263, South Korea: US $19,524)*</td>
</tr>
<tr>
<td><strong>86%</strong></td>
<td>Percentage of GDP per capita that is spent on children younger than 6 years (Chile: 111%, South Korea: 115%)</td>
</tr>
<tr>
<td><strong>14%</strong></td>
<td>Percentage of children that are exclusively breastfed during their first 6 months of life</td>
</tr>
<tr>
<td><strong>20 pts</strong></td>
<td>Percentage point decrease in exclusive breastfeeding during the first 6 months of life in rural areas according to ENSANUT (fell from 37% to 18%) between 2006 and 2012</td>
</tr>
<tr>
<td><strong>1</strong></td>
<td>Children younger than 4 years that die every 2 days from homicide</td>
</tr>
</tbody>
</table>

Source: Own elaboration

*Dollars in PPP (Purchasing Power Parity) of 2009. Includes spending on cash transfers, child care, education and other benefits (does not include spending on health).
They do not constitute a priority either in terms of government action or of public investment. In the areas of health and nutrition there is more information, but there is a lot less data on the current state of Mexican children in key areas for early childhood development such as cognitive or socio-emotional development.

The institutional arrangement that upholds the State’s highest interest in early childhood is broken.

In terms of public expenditures, the investment we make in the smallest children is also small, and most of this spending goes toward children aged 3-5, with a much smaller proportion going to the stage between 0-3 years of age.

On the one hand we spend little, and on the other hand, we don’t know much about how we spend, and the effectiveness of every peso. The model of centralized provision of a great part of the services aimed at the youngest children and their families faces serious challenges to ensure quality of service delivery particularly in remote areas. Different government entities gather socioeconomic information that could be shared to identify populations with specific needs. Likewise, if there are lists of beneficiaries, these are not contrasted between the different programs to detect duplicate services. What results is a model with serious faults in crucial aspects of attention and service quality for children and their families. In addition, there are indications that the coverage of some programs is insufficient, especially of those that could be most beneficial to the youngest children.

To spend better, improved coordination among public efforts must be achieved. The lack of integrated and coordinated ECD policies to provide timely and effective services limits the possibilities that various programs have of achieving greater scope and impact. Furthermore, it leads to a bureaucratic labyrinth for the users. Early child development in Mexico has no home. There is not one high-level instance that regulates and coordinates all the efforts of different sectors to ensure their effectiveness.

**Final Considerations**

To be born in a home with few economic resources should not predestine a child to a life of limited opportunities and interrupted growth. The cost of not intervening in time and in an effective manner is enormous: children that die of preventable diseases, children that will be more susceptible to illnesses like diabetes and hypertension during their adult lives, that are unable to adapt socially and establish positive and trustful relationships with their peers and other adults and that develop aggressive and anti-social behavior. Their educational prospects will also be cut short. Many of them will eventually join the ranks of children with unidentified learning disabilities, children with special needs, children that struggle to remember letters and numbers and that will therefore be completely illiterate, or else, children for whom school “just isn’t their thing.” The first day of primary school may be too late! To remedy this situation, we put forth the following recommendations.

1. **Make them visible:** Create a Development Card for all the children in every state, similar to or even part of the National Vaccination Card. **If the problem is detected in time, it can be corrected!** It is important to make children from low-resource homes especially visible, above all those that live in indigenous, rural, or marginalized urban communities.

2. **Give the smallest children an institutional home.** A team whose reason for being is to create a long-term vision on early childhood in the nation and establish concrete goals, should be established, ideally at the Presidential level. This entity must see to quality through the development of standards that can be implemented across the country, with sanctions for non-compliance.
Conclusions and recommendations

3. **Spend even more and spend better.**
   Invest at least 1.5% of GDP annually. This means going from the current cumulative spending of US $6,589 (PPP of 2009) for child over the first five years of her life, to US $12,447 (PPP). To be effective and equitable, spending should target children from 0 to 3 years of age, as well as those living in marginalized and rural areas. Furthermore, it is necessary to invest resources on programs with proven benefits, targeted to the populations that need them the most.

4. **Prepare and support parents.**
   Generate mass awareness campaigns to educate parents on the critical importance of the first years of children’s lives. A nationwide effort must be made to promote exclusive breastfeeding (what the WHO recommends). We should strive to reach a goal of exclusive breastfeeding for 50% of infants during their first 6 months by 2024.

5. **Activate civil society and professionalize its actions.**
   Organize and activate civil society through the creation of a citizens’ coalition in favor of early childhood development. Private sector and philanthropic organizations can play an important role financing the evaluation and study of innovative programs in a pilot phase, so that these can inform major scale-up efforts in the country.

It takes a village to raise a child. Parents, NGOs, civil society organizations, the media, and the general public are an important part of this village. The development of Mexico’s children will be difficult to achieve without the participation of each and every one of them.