



en breve



April 2003 No. 23

A regular series of notes highlighting recent lessons emerging from the operational and analytical program of the World Bank's Latin America and Caribbean Region

INCLUDING THE DISABLED THE CHIMINIKE INTERACTIVE LEARNING CENTER IN HONDURAS

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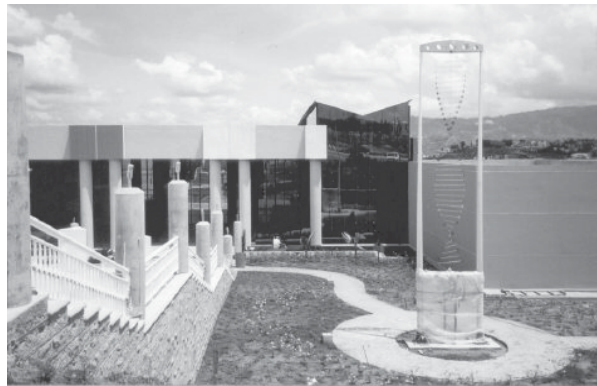
Background: the Profuturo Project

In the aftermath of Hurricane Mitch in 1998, the Honduras Interactive Environmental Learning and Science Promotion Project – Profuturo – was launched as a multi-sectoral effort designed to encourage and expand scientific, environmental, and cultural knowledge and management in the context of Honduras' sustainable development needs and ethnic diversity. Profuturo benefits Hondurans by providing higher quality scientific education, improved environmental management, human capital development, and poverty reduction through a better qualified labor force. Specifically, Profuturo is a pro-poor effort to address some of the long-term needs of Honduras' education sector, the concern for sustainable environmental development, and archeological site rehabilitation in order to expand the country's tourism potential, especially in the Copán Region.

Within these objectives, the project supports the planning, design, and construction of a US\$ 4.9 million Interactive Learning Center – Chiminike – to be inaugurated in September 2003, when it will become autonomous (from the Government), functioning under the private Profuturo Foundation. Chiminike was conceived as an unconventional and non-formal educational facility dedicated to sustainable development. Among other components, the project supports staff and volunteer capacity building and the development of environmental managements plans.

Chiminike Interactive Learning Center

In 1999, 66 per cent of Honduras' 6.5 million inhabitants were extremely or moderately poor. Chiminike is located in the Honduran capital, Tegucigalpa, a city that accounts for nearly 25 per cent of urban poverty in the country. The Interactive Learning Center in Tegucigalpa aims at improving the quality of the education system by creating more effective and concrete learning, and raising achievement levels. Through visits by schoolchildren, teachers, and parents, it will promote learning about the social, scientific, and environmental elements of sustainable development. It is expected to receive over 200,000 children and youth



The Chiminike Interactive Learning Center, Tegucigalpa

yearly and to be incorporated into 75 per cent of schools' lesson plans by 2006.

Chiminike's interactive learning environment nurtures fundamental educational skills in a format that stimulates children's intellectual curiosity, enhances self-esteem, cooperation, independence and interdependence, and celebrates diversity. It has a multimedia center, a multi-purpose room, outdoor recreation areas and four thematic rooms containing a variety of displays and interactive activities carefully designed to serve specific pedagogical purposes. Box 1 (back page) explains more about the assessment process that helped shape Chiminike.

The four exhibit rooms are: (a) "The Human Body" Room, which uses interaction and participation to educate children

about DNA, the human body, hygiene and health, touch and memory, the respiratory and digestive systems, and illnesses to which Honduran children are most vulnerable; (b) the “City” Room introduces visitors to the main institutions in an urban area such as Tegucigalpa, teaching about the functioning of a supermarket, a Bank, television and radio stations, and provides children with a sense of citizenship and an understanding of their surroundings; (c) the “Honduras and its People” Room, in which gender and the social and cultural diversity of the country and its heritage are illuminated; and (d) the “Environment” Room, focused on sustainable development and how citizens can better interact with their surroundings in a safe and eco-friendly manner. For instance, the Rain Exhibit is an interactive activity that teaches children about the consequences of deforestation, the effect on the environment of dams and other infrastructure, and the impact of rain on homes constructed in high-risk areas such as too close to a river.



The Rain Exhibit: Environment Room

Including the Disabled

The Profuturo Project was awarded a Norwegian Trust Fund for Disability and Development to ensure that it benefits Honduran children with special needs. The Disability Trust Fund allowed the Profuturo Project to integrate a comprehensive disability dimension in the Chiminike Interactive Learning Center. The trust fund made it possible to hire a consultant with experience in education, disabled access options, and the philosophy of interactive learning. The consultant conducted an extensive study on the most effective and feasible methods to make the facility and all its exhibits, signs, displays and workshops accessible to disabled children, including the hearing, sight, motor, and mentally impaired.

The Disability Component of Chiminike consists of facility accessibility and display adaptation to fit disabled children’s needs. The adaptations were based on the special pedagogical, psychological and physical needs of disabled children. The goal was to produce an environment that is entirely inclusive, non-discriminatory, accessible, and that provides learning opportunities for *all* visitors. Such strategies stimulate respect for and solidarity with the disabled, and enable the maximum possible independence and normality for the children. Furthermore, interaction among children in the

Chiminike setting became part of a strategy to sensitize non-disabled children and parents and increase awareness of the issue, by underpinning the daily challenges they face.

The strategy to make Chiminike friendly to the disabled consists of four parts:

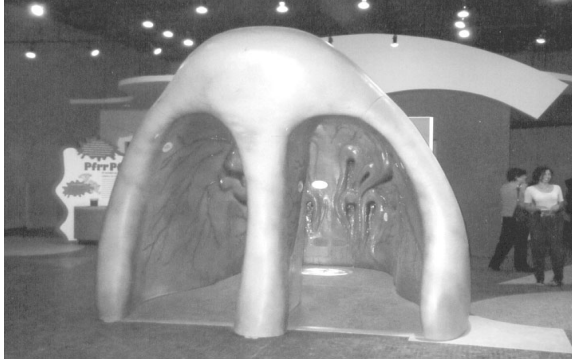
Training of Guides. A manual was developed that trains guides in appropriate teaching techniques and provides them with the confidence they need to deal with children with special needs and promote a natural learning environment. The manual offers guides a functional description of different disabilities, methodological suggestions for easy interaction, practical communication strategies (including sign language), and child assistance techniques that stress the importance of independence. Once inaugurated, the guides of Chiminike will offer services such as guidance, translation, instruction, and assistance in all exhibits and activities, whenever requested by a visitor.

Braille Texts. Chiminike will supply material and have signs, displays and activities with explanations in Braille. These materials contains brief descriptions of each room. Each interactive display and activity will be accompanied by posted instructions in Braille. The Braille signs have been made using dymo tape, a hard adhesive tape that marks and embosses Braille writing, the most cost-effective way to adapt the signs that had already been produced.

Activities have been adapted to take into consideration the special needs of the visually impaired. For instance, in the supermarket activity, where fake money will be used, special bills written in Braille will be distributed to the blind. This will allow them to participate in the activities without the feeling of being excluded, and will also sensitize others about the daily difficulties they face and the need for more inclusive measures.

Multimedia Center. Chiminike will include a multimedia center fully adapted to the disabled, donated by CNN and UNICEF. Appropriate materials were recommended and resources for disabled children and adults, such as audio tapes, videos, books, and recorded books, will be made available. The multimedia center will also have computers with software designed for use by the blind, such as Jaws and Zoom text, and a special Braille printer.

Other Exhibits and Building Adaptations. Children with disabilities will be able to take full advantage of all exhibits given the adaptations introduced. The “Exploring the Nose” exhibit, for instance, consists of a giant nose that children can walk into and get to grips with its physical attributes. The nose sneezes periodically, making a loud noise. Children with hearing impairments will be able to go barefoot so that they can feel the ground vibrating instead. In certain cases, where displays do not allow for participation by children with some type of disability, there are small replicas that imitate the shapes and dimensions and achieve the same objectives so that they can also enjoy the full benefits. Also,



Exploring the Nose Exhibit, Human Body Room

adaptations were made to the building layout and activities, so as to take into consideration the ease of accessibility and mobility of physically handicapped children.



Stairs and Ramp: City Room

Lessons Learned

The following lessons have been learned at this stage of the project's implementation:

Increased Awareness. The Disability component of the Profuturo Project has promoted social awareness of the challenges faced by disabled people within the project and among the population. It has provided a the basis of better understanding of this multi-facted issue and will hopefully promote change and eliminate discrimination founded on common misconceptions.

Feasibility. This experience taught us that disabled-friendly adaptations can be simple and cost-effective, and do not necessarily require a complex or lengthy process. Crucial to the successful implementation of the disability component was an extensive study conducted by the disability specialist on the most effective and feasible methods to make the facility and each of its exhibits, signs, displays, and workshops, accessible to disabled children.

Expertise Required. A disability specialist is essential for comprehensive and proper integration of the needs of the

disabled, including the hearing, sight, motor, and mentally impaired. In order to accurately and successfully main-stream concerns for the disabled in a project, a specialist experienced in education, disabled access options, and the philosophy of interactive learning is required.

Outlook

While the Norwegian Trust Fund for Disability and Development allowed the addition of the disability dimension to the Chiminike Interactive Learning Center, this element rapidly became a core part of the Center's strategy and the project's development objectives as a whole. The lessons that the Center teaches concerning science, environmental management and cultural diversity will be greatly enhanced by the sense of respect that it now entails. Beyond teaching about how to treat the human body with esteem, the environment with care, the city with respect, and the country's diversity with pride, Chiminike will become a lesson on living together and including everyone in society.

The disability component of Chiminike offers the following challenges:

Room for improvement. Chiminike aims to improve the quality of the education system by creating more effective and concrete learning and raising achievement levels. The effectiveness of these strategies and the complementarities with school curricula will need constant review and re-alignment.

Scaling up. Chiminike is expected to receive over 200,000 children and youth yearly and be incorporated into 75 per cent of schools' lesson plans by 2006. Assessing how these goals are being met and the practical implications of these numbers on educational objectives and facilities maintenance will be interesting and require close monitoring.

Building local ownership. Chiminike is to be inaugurated in June 2003, when its management will move under the private Profuturo Foundation. Building partnerships with local NGOs and universities will be crucial for assuring its long-term sustainability, in both financial and managerial terms. It is hoped that local ownership will ensure the preservation and continuing expansion of the disability element.

About the Authors

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More information

Learn more about the Profuturo project at <http://www.profuturo.edu.hn>

Box 1 - Designing Chiminike

Influences and Opportunities for Children in Honduras

As part of the monitoring and evaluation system established for the Profuturo project, an assessment among children was carried out in April 1999. The assessment helped guide the design of the Interactive Learning Center (ILC), its exhibits, training activities, and outreach programs. The main data source was a questionnaire filled out by 131 children (72 boys and 59 girls) in the sixth or seventh grades in five schools (both public and private) in the Tegucigalpa area, where the ILC is located. The questionnaires were complemented by a focus group in each school composed of about eight students, and by a focus group of 11 children in a sixth school.

Main Findings from the Questionnaire

Focus on the Family. Honduran children, particularly in this age group, are extremely focused on their family, enjoying their daily life and leisure activities with their immediate and extended families. A strong family orientation is the crucial component in their identity. Attachment to their family and interdependency among family members are placed on a higher plane than individualistic fulfillment and self-sufficiency.

Defined Gender Roles. Overall, boys and girls perceive the roles of men and women as based on the functions they are expected to carry out in the family. Boys emphasize their role as the “strong sex” and their “freedom.” Girls emphasize their “gift to procreate” and “moral superiority.” These qualities are perceived as ‘natural’ with their complementarity determining different social functions in and outside the family.

Equality of Educational Opportunities. There is a consensus between boys and girls that both should have the same educational opportunities. Some girls list the education of their children as the principal motivation for their own education, which suggests some ambivalence in the meaning that they attribute to formal education. Boys are less sensitive to the egalitarian perspective on genders. Although they are not immune to pressures for the equality of women, they vigorously adhere to the traditional division of labor between genders, regardless of household composition or whether or not their own mothers participate in the family income.

Inequality on Value of Work. Most students have professional aspirations, and with some exceptions, there are no clear distinctions between genders in terms of career choices. Yet, boys and girls differ on the meaning of professional work. For boys, work is not a choice, it is immediately related to the family’s survival or well being. Girls attribute about four different meanings to women’s work: (a) as a necessity; (b) to be independent of men; (c) secondary as compared to her role in the family; and (d) as a matter of personal choice.

Inception of Honduras. For most children in the study, history begins with the Spanish conquest and they focus on three episodes: the conquest, independence, and the breakup of the Federation of Central American States. Students do not express any sense of connection to the pre-Hispanic Maya civilization.

They view history as a series of unconnected heroic episodes, as it is presented in their textbooks.

Honduran Identity. Children seem to draw their identity and pride as Hondurans from a variety of sources. The most frequently mentioned sources of pride are the love of nature and specific character traits, such as a work ethic and a sense of resiliency.

What Children Do Not Like. Children in the study do not like symptoms of poverty and are concerned about the issue of corruption. However, their concern with these problems is matched by a sense of self-reliance and a desire to help their country.

How did these findings influence design of the ILC?

The ILC will recognize the **importance of family** in children’s lives and design exhibits, concessions, rooms, and other attractions for the entire family and which encourages their participation.

The exhibits will consider including images that help children **visualize equality between genders** in the workplace and legitimize equality of responsibilities in the household. A good example is guides. These will not adhere to traditional gender roles. For example, a male guide might teach cooking while a female would demonstrate construction techniques.

Exhibits on the environment will establish a direct connection between **identifying problems and developing solutions** and cover topics such as biodiversity, traditional knowledge, and sustainable development.

Exhibits devoted to historical themes will show how **historical processes have helped to shape the present** reality of Honduras.

The ILC will also emphasize the **knowledge and practices of pre-Hispanic cultures** and the linkages to the living culture of the indigenous communities in Honduras.

Images and exhibits will be inclusive and **avoid ethnic stereotypes**.

This assessment reinforced the justification for the ILC to complement the formal educational system. Children in an ILC learn at their own pace and **no child is “left behind”** since they can spend as much time as they want at each exhibit.

The full study, entitled, “Family, Gender and Identity” : Influences and Opportunities for Children in Honduras” (Nov, 1999) is available under “Gender” at <http://www.worldbank.org/lac>

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