

# **dot-EDU Honduras Interactive Radio Instruction for Kindergarten Project**

## **Summative Evaluation Executive Summary**



Submitted by Education Development Center, Inc.

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As part of its overall poverty reduction strategy, the Government of Honduras is seeking to accelerate progress toward meeting its Education for All (EFA) goals. To date, Honduras has yielded positive results in certain areas of EFA. Growth rates in school enrollment, reduced illiteracy rates and an increase in the average schooling a Honduran child completes are indicators of progress. But Honduras is still behind in achieving its main goal: the universal completion of primary education by 2015. Therefore, the Education Development Center, Inc. (EDC) and the Honduran *Fundación para la Educación Ricardo Ernesto Maduro Andreu* (FEREMA) have focused its support with funding from the United States Agency for International Development (USAID), on the development of an alternative learning system of preschool kindergarten education that will provide the cornerstone for a national program that eventually will reach children not served by the current system – estimated to be 125,000 annually – as well as children already enrolled in the existing preschool system.

The project represents more than a pilot project to develop new curriculum: it is a significant investment toward the creation of a project that can be brought to scale as quickly as public and private commitments permit. EDC has provided the overall mechanism and the technical assistance to accomplish the set of goals described above. FEREMA has provided the local resources and personnel to see that in-country activities are achieved. Both institutions worked with the Honduran Ministry of Education to ensure that the design of the package and follow-up activities were in line with the national curriculum for preschool education. The project titled *Juego y Aprendo* is an interactive learning package providing 108 forty-five minute preschool kindergarten lessons. The multi-channel learning system includes print materials for students, a guide for teacher/educator-led activities, posters, games, parent support education materials, and on-the-job teacher/educator professional development materials related to each lesson. The IRI project includes a brief teacher/educator development segment that is expanded upon in print materials. Consequently, the multi-channel learning system addresses both student learning and teacher/educator development objectives.

In 2004 the *Juego y Aprendo* project was implemented in Honduras in three geographic areas: Comayagua, Francisco Morazan, and La Paz. A total of 53 centers were created for the purpose of implementing a preschool program through the Interactive Radio Instruction (IRI) approach. Since *Juego y Aprendo* is to serve as an alternative learning system for the country of Honduras as it attempts to meet its own educational goals of increasing access to preschool education, it was determined that a summative evaluation be undertaken. The outcomes of the evaluation were seen as important in order for the government and other local and international NGO's to decide how best to expand the project and take it to scale.

Baseline data were collected in April, 2004, and the comparative data collected in November 2004. Included in the full report is a description of the sample, the instruments used and their purpose, as well as a description of the methodology and timelines for data collection. The results obtained on each of the instruments is summarized and conclusions drawn about the short-term impact of the *Juego y Aprendo* project. Due to

the short duration of the project (12 months), which included development and implementation of the intervention and the evaluation, the timeline for the full project was too short to be able to identify distinct differences in developmental outcomes for the children participating in the *Juego y Aprendo* project. FEREMA is taking up the cause of continuing to follow a sample of children from the original 53 pilot centers. This follow up information will be useful in determining whether the program will have a lasting impact on the children. Nonetheless, the results of the evaluation show gains for children and changes in the knowledge and skills of adults who support children's development (parents and teachers) that suggest that over time there will continue to be positive outcomes for children from the *Juego y Aprendo* approach.

The instruments were adapted or created by EDC, who also provided training on the use of the instruments to the fifteen evaluators chosen by Christian Children's International Honduras (CCF-H). The instrument selected and adapted to assess the learning environment, the ECERS (Early Childhood Environmental Rating Scale), evaluated each center on six categories and within each category there were between one to seven indicators under which a center could receive a score between one and five. A set of interview instruments measured teacher, parent, and community attitudes towards education and their level of participation in the centers. Data were also collected on the family (the economic status and education level of adults in the home, for example) and the physical characteristics of the home. The evaluation also included a measure of each child's development. The Child Development instrument created by CCF-H was chosen in anticipation that it was related to outcome measures associated with the basic requirements outlined in the Honduran National Curriculum: *children graduating from the Community Centers for Preschool Education (Centro Comunitario de Educación Prebásica–CCEPREBS) will have acquired the skills to successfully complete the first grade.*

The control and experimental samples were chosen from three communities where the IRI was piloted and the initial 53 centers established. Those who attended the *Juego y Aprendo* program constituted the experimental groups and the teachers received training specific to the project. The control group consisted of children attending a preschool already in existence in the community where neither the teachers nor the children were exposed to the IRI program.

Key findings are:

- ***A change was exhibited in the classroom environment.*** Preschool centers were purposely established so that children and the community educator would have a space to meet. The ECERS revealed that changes in the environment took place throughout the year, with educators becoming more conscious of room arrangement, the use of local materials for activities and teacher-to-child interactions. On the pre-test the urban centers (control and experimental) scored higher than the rural centers. On average during the pre-test the urban centers scored a three (3) indicating the environments had minimal equipment that was in good condition and child centered activities. Urban centers in the community of

Francisco Morazan scored the highest. The rural community of La Paz, being the farthest from the capital Tegucigalpa, scored the lowest in regards to environment. In the rural area, the combined score for the experimental group was somewhat higher than the score for the control group, but in the urban area schools the pre-test scores were essentially the same for the control and experimental groups. The greatest change was seen for the rural groups who scored lowest at the beginning of the year; they evidenced a greater increase in their scores over time than the urban centers.

- ***In all groups, interviews revealed that parents had many of the same expectations in terms of what they thought their child would learn from preschool (e.g. to read, write and count).*** The parent questionnaire for the pre-test was implemented to get an idea of the educational experience of parents, the economic and family situation in the home, the attitudes of parents towards education and types of materials and activities available in the home to support the child's education.
- All parents sent their child to the preschool so that they would be prepared for the first grade. The parent questionnaire for the post-test was slightly modified to be able to ascertain the experience of the child and parent throughout the seven months of the child's participation in the *Juego y Aprendo* project, especially to measure the parent's participation in the education of their child either through direct participation in the center or contact with the educator, to get a sense of the parent's opinion of the *Juego y Aprendo* project, whether or not the parent felt the project had an impact on the child's learning, and finally to gauge whether or not there was a change in the parent's attitude toward education.

Of interest is the extent to which parents are involved in the preschool. There are several levels of participation that were explored. At a minimum level at the beginning of the year, only a quarter of the parents participated in the opening of the center. Furthermore, at that point, only 30% of the parents had received any written information about the preschool program. On the other hand 91% of parents/ families said that they had visited the preschool classroom before classes had begun. Post-test interviews revealed that, with the exception of two to three parents in the entire sample, parents were involved in the preschool. Many attended regular parents meetings and a large majority volunteered or contributed to the center in one way or another.

Data also showed that parents were interested in how their child was progressing as indicated by the fact that communication between the teacher and parent occurred at least weekly, and for some there was daily communication with the community educator.

- ***The Juego y Aprendo project had a direct impact on the community educators who were the group who received continuous training and support from the***

**project.** The teacher questionnaire for the pre-test was developed to get a sense of the teachers' experience, family situation, opinions about what children might learn, role of parents in the center and types of skills and knowledge interested in acquiring. The post-test followed up to determine if teachers felt the trainings, supervision and support they had received met their priorities, changes in operation of the center, relationships with parents including promoting parent involvement and to find out if teachers had been able to transfer the skills and knowledge learned into concrete activities with the children.

Comparative data revealed that overall teachers felt they had been provided training, information and support on their topic priorities. Teachers were also asked a set of questions to assess their opinions and attitudes about what children should know. Out of the 20 topics related to what it is important for children to learn in preschool, at the beginning of the year, several educators felt that it was not "very important" for a child to know how to read or write but by the end of the project year 100% of teachers felt that it was "very important" for a child to know how to read and write. In fact, at the end of the year, most topics were rated by the teachers as "very important" for a child to know. Many educators had attempted to establish "learning centers" within the classroom environment. The fact that teachers began to create their own activities was an indication of their ability to transfer the knowledge they had acquired into concrete actions. Through interviews and observations it was possible to see overall progress in the attitudes, skills and information of the educators. It was through them and their use of the audio programs and supporting materials that changes were made throughout the project.

- ***The majority of the comments made throughout the community interviews were that the center was important as it would support and advance the education of the children.*** The goal of the community pre-test interview was to determine priorities and concerns and level of involvement of community members with regards to the education of young children and in particular the *Juego y Aprendo* center. The post-test interview was close-ended and served to get a sense of whether or not the community had been involved in the preschool center throughout the year as well as to determine how the community may be able to support the sustainability of the preschool center with the continued use of *Juego y Aprendo*. Overall, responses did not differ from community to community or from rural to urban areas. Other comments made were that support was needed from the local municipality to build a school house and to provide basic services such as sanitation and water. None of the interviewees felt that the community could provide the educator's salary but noted that the educator had been well trained and now had the ability to work with children and teach them and therefore should be paid a higher salary. Several community members mentioned that the community is a poor area with little or no resources of its own. However, several participants felt that the community could provide some sort of educational materials, such as toys, and build furniture that could be used in the

center. Despite these issues, community interviews revealed that for the communities involved, the preschool center was important as it presented an opportunity for the young children that were not otherwise available. Community members obviously want the project to continue but they are not aware of how to go about allocating the resources to maintain it. So, without the financial and educational support of the project there is some question as to whether or not the preschool centers will be maintained.

- ***In terms of outcomes on the Child Development Scale, the results are encouraging for the children participating in the Juego y Aprendo project as the data revealed that the program made a positive impact on the children in the experimental group across all developmental areas bringing the majority of the children from “Needs Attention” and “High Risk” to “Developed” and even a small group into the “Advanced” category.*** The Child Development Scale designed and produced by CCF-H was used to measure the development of each child participating in both the control and experimental groups. What is interesting from the data gathered is that the pre- and post-test findings were consistent across all the groups (rural control and experimental and the urban control and experimental groups). In essence there was an overall improvement in terms of development. This is most notable in the upward shift from the ‘Needs Attention’ category to ‘Developed’ for all groups, regardless of location or whether or not they were a part of the project. At the end of one school year of participating in the project, more than half of the children were ‘on-track’ developmentally, with rural children making more progress than their urban peers. The fact that scores for children in the experimental and control groups were not significantly different is interesting and raises the question of what it means to be ‘trained’ as a preschool teacher considering that the teachers/educators in the existing preschool programs have received more training and have more experience than the teachers/educators volunteering in the *Juego y Aprendo* program.

Finally, the short term summative evaluations revealed that through a low cost, alternative learning system, positive changes can be made to the skills, knowledge and attitudes of children, community educators, parents and the community at large. Due to the positive outcomes that the project has revealed FEREMA has been able to secure additional funding and throughout 2005 an additional 2000 preschool centers using *Juego y Aprendo* will open, helping the country of Honduras to provide quality preschool education to children not currently served by the existing system and making progress towards its goal of providing education for all.