

Improving Education Quality (IEQ) Project

EVALUATION OF THE TELEBÁSICA PROGRAM, HONDURAS

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Acronyms

BEC	Basic Education Center
CICAI	Intibuca Indigenous Technical Training Center (Centro Indigenista de Capacitación Artesanal Intibucano)
EDU/SAT	Mexican Satellite for the Transmission of Educational Programs (Satélite Mexicano para la Transmisión de Programas Educativos)
IDB	Interamerican Development Bank
MOE	Ministry of Education
NGO	Non-government organization
RB	Rendimientos Básicos
SE	Secretary of Education (Secretaría de Educación)
SEP	Secretary of Public Education (Secretaría de Educación Pública)
TB	Telebásica
UNAH	National Autonomous University of Honduras (Universidad Nacional Autónoma de Honduras)
UPN	National Pedagogical University (Universidad Pedagógica Nacional)
USAID	United States Agency for International Development

Executive Summary

This is an abbreviated English version of a more extensive report available in Spanish. The study was prepared at the request of USAID/IEQ to provide information for those who make national educational policy and planning decisions in Honduras. The study results offer comprehensive, research-based information on experience to date in Honduras with Telebásica (TB), a program patterned after the Telesecundaria program in Mexico that offers junior secondary education to grades seven through nine in 15,000 centers.

The TB program offers five subjects, Natural Sciences (biology, chemistry and physics), Social Studies (universal world history and general geography), Mathematics, Spanish Language and Literature, and English as a Foreign Language. The delivery system includes exhaustive student and teacher manuals, fascinating instructional video sequences, and in-service training of teachers in active teaching-learning methods.

The Telebásica pilot project and the EDUCATODOS project that administers it are both innovations in basic education. TB works exclusively at the 7th through 9th grade levels and operates within Basic Education Centers (BECs), a program of the Honduran government to expand compulsory (basic) education from six to nine grades. BECs are primary schools that have added grades seven through nine to their former six grades with the idea that the community will help provide the resources for the expansion. BECs with Telebásica could be described as self-managed creative schools that use teaching methods and management processes that distinguish them from traditional schools.

The objectives of the study were to: a) determine the suitability of the TB curriculum for Honduras and how it compares to other curricula in the country; b) evaluate the structure, administration, and operation of TB; and c) establish the cost structure of TB in order to estimate what financing would be necessary should the program be expanded. Three research methods were used: a) Documentation: study of documents and existing information on Telebásica and on the Mexican Telesecundaria; b) Qualitative: in-depth interviews, focus group discussions, and direct observations; and c) Quantitative: a questionnaire survey for teachers and another for students, looking at the role of the teacher and student, the use of the television sequences, basic texts and guides and, of course, an analysis of cost and achievement data.

During the pilot phase, the principle TB actors (administrators, evaluators, teachers, students and parents) have shown that the delivery strategy has adapted well to Honduras. The recently created (1997) BECs have been enhanced by TB in those centers where it functions. Similarly, TB has been demonstrating its potential while being administered within another basic education project, EDUCATODOS, an evening interactive radio education project. By adapting the Mexican

Telesecundaria paradigm, TB has created a new model suited to the Honduran institutional, cultural and (sometimes problematic) educational infrastructure.

THE TELEBÁSICA CURRICULUM AND STUDENT ACHIEVEMENT

The TB curriculum, organized by subject, is more complete, exhaustive and universal than others in Honduras. Its only limitation might be the lack of Honduran emphases in the universal history and general geography courses. Otherwise, the content, texts, manuals, teaching processes, and ways that the teacher, the students, and the community work together have created what we have found to be an effective and cost-efficient system. The effectiveness is due also to the fine technical and logistical support offered by the staff of EDUCATODOS. The system has produced a clear improvement in achievement and has reduced repetition and dropout rates in the BECs where it operates.

There have been several “national curricula” proposed in Honduras, each with somewhat different programs of study and methodologies, but none has been fully developed as yet. One proposal of the Ministry of Education (MOE) called “Rendimientos Básicos” (RB) (1996) defines what students should know when they finish the ninth grade. Another is a draft Curriculum Guide (1999) of a Bipartisan Commission that goes into greater detail than the RB document. EDUCATODOS is developing an integrated curriculum that uses transversal nuclei around themes rather than traditional subject matter for its interactive radio project. Telebásica, in turn, uses more traditional subjects in its curriculum. Although all of these several curricular approaches package content in different ways, our analysis of them suggests that there are very few basic differences in coverage. Of all the curricula examined, Telebásica has the most comprehensive set of materials for grades 7 through 9, and provides somewhat more depth in the sciences than the other curricula.

In terms of student evaluation, in TB as in the other curricula mentioned above, various diagnostic evaluation approaches are recommended and all propose a flexible approach to student evaluation. In TB, two types of student tests are used: process and institutional. The process tests are intended to help the teacher and students see what learning problems there are in the classroom and are given at the end of each content module. After three process tests, an institutional test is administered for the purpose of comparing the achievement of the students. Students and centers are ranked according to student performance on the institutional tests.

During 1999 and 2000, the 36 TB centers showed positive results on the institutional tests. In a 1999 study by the Evaluation and Monitoring Unit of EDUCATODOS, overall achievement is significantly better in all subjects in the BECs using TB than in the centers that do not use TB. Nonetheless, overall achievement rates are still relatively low (an average of 69% correct answers on institutional tests in TB centers vs. 55% in non-TB centers). Repeater and dropout rates are high in both groups,

the second to some degree a result of the first. However, dropouts are decreasing in TB groups and in no case did families indicate that the TB program was the reason for dropping out.

The actual number of days in class in the BECs is far below that which is recommended in the several Honduran curriculum guides and in the TB curriculum. Clearly, sufficient time in class is necessary for full achievement of the goals of any delivery system. In addition, better preparation of TB teachers in English is needed, and additional history and geography programs developed that emphasize Honduran themes. Finally, TB teachers should be encouraged to explore new ways of monitoring student progress, perhaps through student portfolios that track all activities of the students in the school community.

TELEBÁSICA PILOT PROJECT COSTS¹

The Telebásica pilot project has been financed by the Government of Honduras with the support of the United States and Mexico. After this study was completed, Japan contributed funds for the purchase of additional equipment needed in the centers. Until the end of 2000, the initial three governments had committed the following funds to the operation of Telebásica:

a. Total Operational Costs 1999-2000 (estimate)	Lps. 19,080,114
b. Contribution of the United States/USAID (estimate: includes television reception equipment for schools and salaries)	Lps. 3,499,374
c. Contribution of the Honduran Government (estimate: primarily teachers' salaries and buildings)	Lps. 8,498,000
d. Contribution of the Mexican Government (in kind, books, tapes, training services)	Lps. 7,082,740

The pilot project is scheduled to end in December 2001 and it is estimated that by then the three grades, 7 through 9, will be operational and an estimated 6,000 student years of instruction will have been produced. The total cost through 2001 is estimated to be Lps. 23,240,942 or approximately Lps. 3,873 per student year of instruction (US\$255). The pilot project, of course, benefited from the fact that the text and television materials had already been developed in Mexico, and EDUCATODOS provided considerable infrastructure support including office space for the TB headquarters staff, transport and evaluation services. Even if these additional services were factored in, the yearly per-student cost of TB would appear to be reasonable for a pilot project that does not benefit from the cost-efficiency of scale. If the program were expanded dramatically, per-student-year costs would drop.

¹ The exchange rate at the time the study was written was Lps. 15.15 to US\$1.

ESTIMATED COST OF CREATING NEW TELEBÁSICA CENTERS

a. Initial cost of each section (grade) of Telebásica (classroom construction, student and teacher desks, television set and video recorder, cabinet to store equipment)	Lps. 184,500
b. Initial cost of a Telebásica center with three grades	Lps. 553,500
c. Cost for resources of the Central Office to handle more centers:	
Video Reproduction Equipment	Lps. 160,000
Satellite Antenna and Decoding Equipment	Lps. 12,000
Two Computers	Lps. 46,600
Five Storage Cabinets for Videotapes	Lps. 30,000
d. Annual operational costs for a Central Office capable of logistical and pedagogical support of TB centers in rural areas:	
Salaries	Lps. 1,440,000
Travel And Per Diem	Lps. 150,000
Office Space	Lps. 140,000
Equipment Purchase And Repair	Lps. 130,000
e. Annual operating cost for a TB center with three grades and thirty students in each grade	Lps. 424,650
f. Annual operating cost of the Central Office of TB	Lps. 1,860,000

RECOMMENDATIONS

If the Telebásica program is expanded in the future, the central Telebásica administrative and service office must be staffed and equipped to provide both logistical and pedagogical services to increasing numbers of TB centers. Assuming an expansion of no more than 75 centers a year, the central office should include the following staff: a general Pedagogical Coordinator; five specialists, one for each of the curriculum areas (Natural Sciences, Social Studies, Mathematics, Spanish Language and Literature, and English); an Evaluation Specialist; an Information and Database Management Specialist; and an overall Administrator. Job descriptions must be drafted and the permanent place of the unit and the TB program within the structure of the education system of Honduras must be decided.

If EDUCATODOS continues as a parallel effort (basic education through an interactive radio approach in volunteer centers in the evening), there should be a careful analysis of how the infrastructure of each program can complement the other. Experience to date suggests that an integrated administrative and technical infrastructure would be cost-effective, educationally significant, and each program would benefit from affiliation with the other.

The coverage of TB should be extended to the extent possible within the financial and technical resources of the SE and Honduran civil society. There are few other possibilities of expanding the coverage of effective junior secondary education in Honduras at such minimal cost. Telebásica is a sophisticated teaching-learning system that is, paradoxically, both easy to use and very cost-effective.

A “Social Marketing” program should be undertaken to prepare communities, educators and government officials to accept TB innovations and to deal with education system problems that affect not only TB but also the quality of the entire system. Those wedded to the idea of traditional schools must realize that new innovations can be both effective and efficient. Teachers must realize that they must be in class for the number of days prescribed in the various curricula. Communities, schools, teachers and administrators must realize that too many community activities and training sessions can take time away from class and thus must be used carefully. Similar social marketing programs have helped raise the awareness of the Honduran public to health issues.

TB might wish to concentrate initial expansion on the poorest regions of Honduras, those areas that are marginalized in terms of basic services. This would contribute to the nation’s Poverty Reduction Program. Around a third of the Telesecundaria centers in Mexico are in non-electrified areas and they function with solar panels. Such an effort would make sense in Honduras as TB is expanded to poor regions with no central electrical service.

In terms of in-service training for TB teachers, three models should be developed: one for teachers who have recently entered the teaching profession, another for teachers of two or three years of experience, and a third for teachers with more than three years of experience. In addition, special in-service programs for English teachers are needed and should include training in content and methodology. The introductory classes to prepare sixth grade students for seventh grade should be made a permanent feature of the program, and teachers should be encouraged to use a Student Portfolio system, suggested in the Curriculum Guide, to continuously track and evaluate all of the school experiences of the students.

The “academic programming” (sometimes called “calendar making”), which is used in the Honduran TB strategy by the teacher to plan what will happen in each TB class, shows promise. It can be further developed as a process of negotiation between teachers and supervisors at various levels, resulting in a commitment of both groups to following the agreed-upon strategy.

TB officers have been exploring the possibility of direct broadcast transmission of TB programs. This should be encouraged. If TB centers can receive the broadcasts directly, the cost of reproducing and distributing videotapes would be reduced, although the costs of broadcast time might cancel out these savings. The pace of the broadcasts might encourage TB teachers to follow the broadcast schedule and thus increase the number of class days available to students. In all likelihood, even if direct

broadcast of the video lessons is possible, there will be many schools in rural areas that cannot receive the signal and videotape distribution and use should continue for these schools.

Alternatives for the future reproduction of TB texts and manuals must be explored. In some Central American countries that use TB, the materials are reproduced using office copy machines. Another possibility would be to accept what we understand has been a Mexican Telesecundaria offer of providing copies of the materials at their printing cost. As the Mexican program produces tens of thousands of copies a year for their own use, economies of scale would apply, and the per copy cost of an additional print run for Honduras would be reduced.

1 Introduction

1.1 This study was done to examine the potential and institutional viability of Telebásica (TB), which has been adapted in Honduras from the Mexican Telesecundaria program, an alternative delivery system for seventh, eighth, and ninth grades. The study had the following objectives: a) to determine the relevance of the TB curriculum and its relationship with the curriculum of Rendimientos Básicos (RB) of ninth grade and of EDUCATODOS, and also its impact on students' academic performance, attendance and dropout rates, attitudes, school environment, and the community; b) to evaluate the infrastructure, the administration and the operation of TB to assess the efficiency and the effectiveness of the administration and the planning, supervision and logistics; and c) to establish the costs of TB if it is used to establish new Basic Education Centers (BECs) and the possible costs of other scenarios.

1.2 It is intended that the data presented in this report will make it easier to make policy and strategic decisions concerning the future of the TB program in Honduras. In this study, we dealt with seventh and eighth grades, since ninth grade of TB started only in February 2001 and we completed the fieldwork and data collection in late 2000. In each of the two grades, we evaluated teacher and student participation in the use of television programs, the Learning Guides and the Basic Concepts texts.

1.3 Three forms of investigation were used:

- *Documentation.* Among other documents, IEQ and EDUCATODOS files were examined, along with research done on similar programs gleaned from Internet sources and information provided by USAID, the International Development Bank (IDB) and Secretary of Education (SE) officials. This documentation review continued throughout the investigation.
- *Qualitative.* Focus groups and direct observations complemented the qualitative information described below. First, interviews with EDUCATODOS and TB personnel were done, followed by visits to selected BECs where TB is used to provide junior secondary education. During these visits, classroom observations and interviews were held with directors, teachers, local authorities, seventh- and eighth-grade dropouts and their parents, and some district and departmental education directors. Focus group discussions were held with parents and teachers. Finally, interviews were conducted with key officials, technicians, specialists, and possible donors at the national level.
- *Quantitative.* Through a survey for teachers and another for students, statistical data were gathered on the variables studied, including the teacher's and student's roles in the TB strategy, and the way that the television sequences, books of basic concepts and guides, and other materials were actually used in practice. The questionnaires were based on early pilot work of professor Seth Spaulding and the TB team: Gustavo Izaguirre and Socrates Rodriguez.

2 Curriculum and Methods Analysis

2.1 The study produced in-depth results on all aspects of TB studied. As for the curriculum, it was established that the curriculum of TB, developed by subject, is complete, exhaustive and universal. The only limitation, which is mostly overcome by teacher creativity, is the inclusion of some Mexican themes in the Social Studies curriculum. Otherwise, the curriculum content, the teaching process, and the teacher's role were found to be much appreciated by the students and the community. The efficiency of TB is remarkable due to the learning resources available (television sequences, learning guides, and teacher manuals) and the outstanding technical and logistical support provided by EDUCATODOS. The way the system is put together provides for an effective delivery system that reduces repetition, dropout, and failure rates.

2.2 In addition to hosting the TB program, EDUCATODOS has developed a radio-supported evening program for junior secondary education, as opposed to the TB program that is offered during the day in BECs. The radio-assisted evening program uses an integrated curriculum approach around the following transverse themes: population, environment, health, work, national identity, citizenship/democracy, and personal and community development. TB, however, uses the traditional subject matters in its curriculum and operates during the day as an extension of primary schools that have become BECs. Both the EDUCATODOS evening program and the TB daytime program encourage the participation of the community. When data collection for this study was completed in late 2000, EDUCATODOS had already developed the curriculum of the seventh grade. At some future point, a comparison of EDUCATODOS's completed curriculum for grades seven through nine and TB's curriculum might be appropriate. Preliminary comparisons, however, seem to show that both programs cover similar content, though one uses an integrated approach around themes (EDUCATODOS) and the other uses traditional academic areas (TB).

2.3 As for content related to Social Studies, EDUCATODOS gives more emphasis to the Honduran context, while the TB content in this area is more generic with a slight Mexican emphasis. Both programs seem to cover most of the RB curricula, developed by the Ministry of Education (MOE) in 1996. Other MOE studies include the Curriculum Guide for the Third Cycle (January 1999) and a proposal of the Bipartisan Commission (MOE and UNAH), "Basic Education in the Honduran Educational System." By the end of 2001, there had been no official approval of a final curriculum and it is hoped that any final curriculum map will allow enough flexibility to accommodate differing delivery systems such as EDUCATODOS and TB.

2.4 A comparison of the three curricular proposals, the RB program, Curriculum Guides, EDUCATODOS, follows:

2.4.1 The RB was designed for a traditional curriculum design and not for new “Third Cycle” concepts that have arisen since levels 7, 8 and 9 have been incorporated into basic compulsory education. The BEC curriculum is based on these RB, but it does not include detailed texts, methods, or strategies for reaching the general goals and objectives in the RB. In the case of TB, there are videotapes with books of basic concepts and Learning Guides available for the five subjects of all three grades.

2.4.2 TB uses traditional academic subjects. In the Curriculum Guide and in EDUCATODOS, an integrated curriculum is used with the following five themes (with the traditional subjects spread among the themes): population, health, environment, national identity, and citizenship/democracy.

2.4.3 The main problem that TB teachers encounter is the lack of time to complete the “school program” that they themselves have designed. Information from various sources, including interviews with several MOE officials, indicates that children are in class for less than 100 days a year. The Telesecundaria curriculum and methodology assumes around 200 school days of classroom time (as do the curricula in most countries). In this case, the concerns of the TB teachers are confirmed: there does exist a lack of time to finish the content.

2.4.4 The implementation of the “school program” is also mainly affected by the absence of teachers due to maternity leaves, graduate studies and other factors. These absences, most of the time, are not covered by substitutes. When returning to their jobs, the teachers are under pressure with tests that were left behind. The solution often is to cancel the videotape viewing, to give extra classes, to work additional days, and to convene school on Saturdays.

2.4.5 The teachers indicated that “there is a lot of difference between teaching with Telebásica and teaching in junior high.” Several said: “In the schools there is a lot of time wasted; in Telebásica, more time is needed.” The need arises in TB for working extra time to complete the “school program.”

2.4.6 The three curriculums analyzed outline a very similar profile of what all students should have acquired when concluding junior secondary, the Third Cycle, or the third year (terms used interchangeably in curriculum discussions).

2.4.7 There were not significant differences in curriculum coverage among the Curriculum Guide, TB and the RB. The contents are similar; what varies is the presentation form. The topics in TB have more depth and reach, as can be verified in the videotapes, Basic Concepts texts and the Learning Guides. In the RB, coverage depends on each teacher (although in the Curriculum Guide, methodological suggestions are given). EDUCATODOS develops the content through teaching and learning materials: the books and the radio lessons.

2.4.8 All certified junior secondary teachers are prepared in one or more subject areas. The TB teachers who have said they have problems in their classes generally refer to the lessons that are not of their field. There were Science teachers teaching Math but who do not master the subject and feel uncomfortable. There were Technical Education teachers teaching English but who were not proficient in English.

2.4.9 As for evaluation, both TB and the Curriculum Guide specify various formative approaches, including flexible evaluation. In the TB teachers' opinion, there is much emphasis on evaluating the cognitive element of learning. "We would like [the evaluators] to visit us, talk with the parents, with the director, with the community and you would see that [our students] are not only getting the cognitive part," a teacher said. In spite of the above-mentioned, the teachers generally do not apply the evaluation forms that are suggested in the three analyzed curricula, since each curriculum itself suggests how to evaluate and what to evaluate. With the teachers of TB, the use of the Double Diary (an important resource designed to provide a detailed record of the activities that are carried out) has been encouraged. It is a diary of school and classroom life, of the teaching/learning edifice that teachers and students are building. However, many teachers did not like the idea of a Double Diary. They often feel that it represents an attempt at external control on the part of EDUCATODOS and we found few instances where the teachers were in fact using the instrument.

2.4.10 The evaluation of TB consists administratively of two types of tests: process and institutional. The process tests are part of formative evaluation and are used to reinforce and provide feedback. They are applied when finishing each unit. After three process tests, the institutional test is given. There are three institutional tests a year. There is also a diagnostic test that is applied in the seventh grade and after the leveling course (an introductory module on how to study and learn). The monitoring and evaluation personnel of EDUCATODOS administer the diagnostic tests, both process and institutional. The process tests, in turn, are administered by the teachers. Unfortunately, the teachers often do not think of the process tests as feedback to help them in their teaching. Rather, they use them as traditional quizzes leading to cumulative grades. They are being used as control. The teachers have been heard to say, "We don't have time to use the videotape because it is necessary to cover the contents of the school program...it is necessary to be ready when it is time to have a test." Essentially, many teachers end up catering their teaching to the tests.

2.4.11 TB uses the results of the institutional tests to rank the students in each BEC. It is assumed that this approach provides a stimulus for those who rank highest and an incentive for those in the lower ranks to do better. In many BECs, however, it appeared that poor results on the institutional tests were the product of inadequate time in class due to teacher absences. Often, when teachers are absent, no one substitutes for them during the period in which they are on leave. Later when they return, they are often not able to make up the lost time.

2.4.12 The tests, based on RB standards, were administered during 1999 to the seventh grade in the 36 TB centers, including the Intibuca Indigenous Technical Training Center (CICAI), showed positive results. Of 31 BECs, only nine (29%) had an average of test scores below 60%. Seventy-one percent of the BECs using TB were considered to have shown satisfactory results on the tests. There were eight that ranked above 80% of all schools that took the test. In these eight, the performance was highest in Spanish (80%), followed by English (72%). The lowest averages were in Math (59%). In 2000, preliminary results were quite encouraging. In the first institutional test given to students of the seventh grade, the eight best performing BECs averaged from 82% to 91% correct answers, even better than the previous year. In the eighth grade, the average percentage of correct answers on the tests in the eight highest-ranked BECs ranged from 81% to 94%. Averaging both 1999 and 2000, always of the eight best BECs, the results ranged from 80% to 91%. It is significant the fact that communities like Cololaca in Lempira, Mercedes in Ocotepeque, Subirana in Yoro, and El Espíritu in Copan are among those first places, in spite of the fact that they are communities quite far from the urban centers. In a study conducted in 1999 (by the Evaluation and Monitoring Unit of EDUCATODOS with consultant Ned Van Steenwyck), BEC students who did not use TB were compared with students in similar grades of TB. The results show that TB is superior to the BECs without TB in all the subjects. Neither of the groups, however, had exceptionally high average grades. TB BECs averaged 69% versus 55% for those in non-TB BECs. The dropout rates and number of students with failing grades were high in both groups, the former probably as a consequence of the latter. Many reasons were given by students for dropping out, but none indicated that use of TB in the BEC was a prime reason.

2.4.13 The fact that most BECs (including those using TB) tend not to be in session for the full number of days in the curricular calendar is probably a major reason for underperformance of some students. Also, many TB teachers need more training in English and in basic knowledge and methodologies in the other subject areas. Catch-up, remedial programs for students entering seventh grade might help; complementary video programs, especially in the area of Social Sciences, would improve the TB program. These television sequences could be produced in Mexico or in Honduras, with the advice of EDUCATODOS specialists. The evaluation forms are defined clearly in TB and in EDUCATODOS. Another approach to improving achievement might be to gather student portfolios, as suggested in the Curriculum Guide. These portfolios would incorporate the student's strengths and total school activities along with descriptions of what was learned through the community links. The student profiles should include statements from the parents, directors, teachers, and students. Such student profiles would help systematize TB's evaluation process.

3 Cost Analysis

3.1 TB is several things all at the same time: distance education, a creative and innovative school, a self-managed school, and, naturally, basic education. TB is financed by the government of Honduras and has the support of the U.S. and Mexican governments.

3.2 The three governments have shared, in the stage of the pilot project, the operational costs and maintenance of TB in the 36 centers. The breakdown of the estimate contributions and their total cost are shown below.

a. TOTAL COST OF OPERATION 1999-2000 (Estimate)	Lps. 19,080,114
b. CONTRIBUTION OF U.S. GOVERNMENT /USAID (estimate) (Teacher training, videotape-recorders, televisions, salaries, per-diems, transportation, other)	Lps. 3,499,374
c. Contribution of Honduran Government (estimate) (Teachers, local)	Lps. 8,498,000
d. Contribution of Mexican Government (Books, training personnel for Honduran teacher training)	Lps. 7,082,740

3.2 TB has been developed so far as a pilot project whose first stage will conclude by the end of the year 2001, when the first class finishes the program (i.e., when the ninth grade students conclude their studies of the Third Cycle of Basic Education). TB will only then have concluded the phase that, in a way, could call itself “experimental.” As a consequence, the costs analysis of this period—in this report—is given in this context. The total cost of the pilot project until the end of the year 2001 will be Lps. 23,240,942, which will include the operation of the three grades with approximately 6,000 student instructional years having been offered.

3.3 In spite of the fact that the pilot stage of the project has not yet concluded, the present study allows us to make some conclusions that, without being definitive, have a high degree of certainty. Given the efficient conditions of implementation and the enthusiastic response of most of the teachers and of participating communities, it is not necessary to wait for the experimental stage to finish to determine that TB can contribute efficiently and effectively to the expansion and geographical coverage of basic education in Honduras. Further expansion of the system will create even more efficiencies of scale.

3.4 During this phase, the main actors of TB (administrators, evaluators, teachers, students, and parents) have proven that it is a viable program in spite of the problems and inherent weaknesses of

the Honduran educational system. Particularly interesting is its integration into the new BECs, which began in 1997 and is designed to add junior secondary to primary schools at low cost.

3.5 As for start-up costs, the success of the TB pilot project is due in large part to its being housed administratively and technically under EDUCATODOS. This way, the initial costs that include management, transportation, physical space, and especially test administration, were considerably reduced. The donations of Mexico and of the U.S. have contributed to finance the costs of operation for the first two years. The start-up cost of TB in its first two years might be averaged over a projected ten years of operation in order to have a more accurate estimate of long-term costs. The costs of development of Telesecundaria materials used in TB cannot be calculated; Mexico took 30 years of experience to polish the current Telesecundaria text materials and teacher manuals. As expected, the start-up costs are much higher than the on-going running and expansion costs. In any case, the figures that are presented in this report adapt the costs to the Honduran environment and appear to be very reasonable.

3.6 If the total cost of TB for the three years of the pilot project is in Lps. 23,240,942, it is necessary to divide this amount by the number of student years offered during those three years, i.e., Lps. 6,087 or US\$252 (exchange rate at the time of this study: Lps. 15.15 for US\$1). The number of students in 2001 is an estimate. For a pilot project, this per-student figure is reasonable.

4 Investment Costs For Each Grade

4.1 The total cost of TB, including the infrastructure in the BEC in which it operates (the building and the equipment of the three grades that form the Third Cycle of a BEC) can be estimated as follows:

a. Infrastructure, equipment and human resources for each grade (of one section). Includes classroom construction, student desks, teacher's desk, television, videotape recorder, locker to store the equipment.	Lps. 184,500
b. Investment for the three grades of TB of one section each	Lps. 553,500
c. Investment to strengthen the TB main office in Tegucigalpa:	
Video reproduction equipment	Lps. 160,000
Satellite antenna and receiver	Lps. 12,000
2 computers and accessories	Lps. 46,600
5 cabinets for videotapes	Lps. 30,000
d. Recurrent operating costs (annually) of a central office with the capacity of managing TB technically and logistically:	
Wages	Lps. 1,440,000
Transportation and per-diem	Lps. 150,000
Office rent	Lps. 140,000
Equipment and repairs	Lps. 130,000
e. Cost of annual operation for a TB center with three grades of one section and thirty students each	Lps. 424,650
f. Cost of annual operation of a central office of TB	Lps. 1,860,000,00

5 Comparative Cost Advantages

5.1 TB has significant cost advantages over other strategies that involve complete packages of learning materials and television sequences. Some of these include:

- a. Low costs for RB books and the Learning Guides;
- b. Reasonable costs for the reproduction of videotape programs;
- c. Very low, almost no costs, for the supervision and monitoring of the teachers; and
- d. Reduced costs for the preparation of the process and institutional tests.

6 Reduction of Start-Up Costs of Telebásica

6.1 The institutions that carry out distance education usually have to “invest” between 40% and 50% of the total ten-year operational cost of the program before going into the diffusion stage. This investment goes into the preparation of distance education materials, both text and broadcast, and the necessary infrastructure to develop and service distance education centers. However, TB (and the Government of Honduras) avoided this cost by signing the Agreement of Technical Cooperation with the Secretary of Public Education (SEP) of Mexico. Mexico agreed to provide without cost all texts and TV sequences required for implementing the pilot program.

6.2 Also important was the experience gained from the many years of the Telesecundaria program development in Mexico required to perfect the system.

7 Structure, Organization and Operation

7.1 The future TB central coordination and service unit should consist of a technical team that can provide pedagogical support as well as logistical services. At the moment, the emphasis is on logistical services, essentially getting the printed and videotaped material to the field. The current team is extremely small and working beyond what should be expected from a group of such size. It is necessary to strengthen the central team that manages TB to include new staff to visit individual centers more often and to prepare new TB materials relating specifically to Honduran needs. Also, TB now operates in a limited number of pilot centers. If it expands dramatically to a large number of centers, the central services must expand. Finally, it is necessary to foresee what should happen in the event that it separates from EDUCATODOS, which currently provides support services. At the very minimum, with a modest expansion, the central team must include a general coordinator, five specialists (one for each area: Science, Social Studies, Math, Spanish and English), an evaluation specialist, a database specialist, and an administrative officer.

7.2 If TB remains as part of EDUCATODOS, there must be better communication among the various elements of both programs. The efficiency in handling funds as well as in technical management could improve. At the same time, it is necessary to improve the purchasing procedures for new equipment and supplies. It will be necessary to get more durable equipment and faster video reproduction machines. It should be pointed out that the reproduction of videotapes and their distribution to the centers are crucial, especially since it is not yet possible to establish a continuous broadcasting of the materials through national television. To improve the decision-making process, one approach might be to reinstate the weekly meetings among the heads of EDUCATODOS units, including TB. It would also be very healthy for the future of EDUCATODOS (which for now includes TB) to initiate an “organizational development” planning process in order to come up with a strategic plan that foresees possible future problems and develops strategic alternatives to confront them.

7.3 The organizational aspects are intimately related to TB’s technical operation. The TB model, as a methodological alternative, has been adapted to the needs of its clientele, especially the needs identified in the BEC, of recent creation (1997). The main limitation of the TB centers is the lack of definition of the BECs and their permanent role in the educational system of Honduras. Various evaluative approaches are replacing traditional supervision, which may have both good and bad impacts on the effectiveness of the BEC effort.

7.4 The widespread poverty of the families of the students that attend the BEC with or without TB may set certain limits of what can be accomplished. However, in spite of being very poor, all of the students surveyed could afford clothing, uniforms, school supplies, and food. The students that do

not have these basic necessities generally drop out. It seemed that all the families of the TB students have some stable source of income.

7.5 In addition to teacher apathy, some of which can be overcome through various motivational techniques, there were a number of teachers who seemed to completely lack the necessary dedication to their students and their respective subjects. Many have a second job that interferes with their educational functions in TB. These teachers have few skills to conduct sustained high-quality processes of teaching-learning, as is required by TB's theoretical framework.

7.6 As for the organization and how it functions:

- a. There is no traditional supervision nor monitoring of teachers or classes, but there is something perhaps more effective: a system of self-management introduced by EDUCATODOS into the BECs with TB;
- b. The limited administrative infrastructure leads teachers and officials (of EDUCATODOS) to press for more resources and the creation of new, creative and efficient approaches;
- c. There are various mechanisms that make up for limitations in the program, and TB is moving towards a new institutional culture involving decentralized decision-making;
- d. The teachers feel privileged to be a part of TB;
- e. The training sessions for teachers provides a stimulus as well as professional growth; and
- f. TB is a distance education model that can easily be replicated and extended.

7.7 Most dropouts and repeaters indicated that the reasons for desertion and repetition had nothing to do with what happened in school. As for dropping out, the main reasons to abandon TB (according to the dropouts and their parents) are, in this order: the necessity to work to contribute to the family budget; health problems; marriages, especially in the case of teenage girls; pregnancy; and changing domicile. In only a few cases was there some difficulty with school performance, and even in these cases, this was not the main reason for leaving school. Often, dropouts and their parents initially would give poor performance as the reason for desertion, but upon further questioning, it became clear that other reasons were more compelling.

8 Conclusions

8.1 ACHIEVEMENTS

8.1.1 The decisions by the Undersecretary of Education and EDUCATODOS regarding the design, adaptation, and development of TB have produced extraordinary results: 36 centers with grades seven and eight in only 24 months. Opportunity costs (time that could have been spent on other things) necessary to start this new program were quite high, but the results seem to have justified this investment of time and effort. Part of the technical and logistical effort of EDUCATODOS was directed towards the implementation of TB, starting in 1998 when the three-year pilot project began. As the second year finished, the results were very promising.

8.1.2 EDUCATODOS has not only been able to initiate an innovative and efficient model but has also begun a process that continues to create new approaches to school management and teaching-learning delivery. TB is an innovation with great potential. Starting from the paradigm offered by Telesecundaria of Mexico, Honduras is developing a new, very successful model, which is being adapted to the Honduran context and to the cultural conditions of the semi-urban areas where teaching has often deteriorated in recent years. This model is becoming integrated into the newly created BECs where TB operates. In spite of many difficulties posed by the environment in which it operates, TB is becoming a viable program, both technically and administratively. The personnel and resources of EDUCATODOS (with the assistance of USAID) neutralize and overcome those difficulties.

8.1.3 In spite of the fact that BEC teachers have reasonable training, the additional preparation offered by EDUCATODOS/TB fills a number of gaps. The in-service training courses provide motivation and impel the teacher to become more diligent in satisfying the students' learning needs. The teachers develop new attitudes toward teaching and grow emotionally and professionally. One of them said: "When we finish the course we feel different, eager to give our best to the students and the community." Similar statements were made by 80% of the teachers interviewed. The teacher of TB feels—often for the first time in his/her professional life—that he/she is part of a coherent, responsible organization and that he/she has a sense of direction. This is due in great measure to the training, which is synchronized with three other program components: 1) the process and institutional evaluations; 2) the careful "academic scheduling" done by the teachers themselves ("calendarización"); and 3) the efficient and usually timely delivery of materials (videotapes and books).

8.2 POSITIVE ELEMENTS

- a. **The sense of responsibility of most of the participant teachers.** Most teachers interviewed demonstrated a kind of dignity blended with responsibility as they took on the responsibility to implement the TB program.

- b. **The methodology of TB.** The elements incorporated in the methodology of TB are highly motivational and have contributed to its success. The videotapes, books, tests, and training are elements that are put together in a coherent and stimulating program for both students and teachers.
- c. **The work done by the technical personnel of EDUCATODOS, including the TB unit.** The head office and the technical personnel of the TB component have provided outstanding energy, creativity and time to the operation of the 36 centers of the TB pilot project.
- d. **Political and institutional interest.** The dedication and permanent concern for its operation on behalf of the Undersecretary of Education and the MOE have provided TB appropriate legitimacy.
- e. **The participation of the personnel of the Mexican Telesecundaria program.** As much in the trainings offered local personnel as in other material support, the Mexican educators have shown generosity and authentic commitment in adapting the Mexican Telesecundaria to the needs of Honduras.
- f. **The presence of technical personnel of USAID and of IEQ.** USAID assistance to EDUCATODOS has helped assure the success of the TB pilot program.

8.3 GENERAL PROBLEMS AND POSSIBLE SOLUTIONS

- a. There is neither formal supervision nor routine monitoring of the BECs that participate in the TB pilot project. This gap has been partially filled by the TB “evaluations” and the “academic scheduling,” two processes that have been described in detail in the full Spanish-language report.
- b. The television sequences are not used as consistently as they were intended, especially in the eighth grade. It was found that there is more use of the texts than of the videotapes. The main reason for the infrequent use of the videotapes is that the “academic scheduling” assumes 160 working-classroom days per year, but in the best cases, only 100 days of classes are offered. Even including community projects that are undertaken as school activities, there would appear to be few classes that meet more than 100 days a year. However, it is necessary to recognize that many teachers, with the encouragement of their directors, work extra hours during weekdays and on Saturdays. One reason given for the sometimes-erratic use of the videotapes is that the delivery of them has been quite erratic.
- c. The teachers and directors have indicated that the BEC classes have been cut (in all the centers) from 45 to only 40 minutes “due to the shortage of classrooms” and “because these should be available for the evening classes.” Even with these time constraints, the TB

produces far better achievement results than classes without TB. If a full hour per lesson were available, these results might be even better.

- d. Some teachers do not attend the training workshops or they attend irregularly. This appears to be because of other commitments like university courses and outside employment. The teachers that most avoid the training offered by EDUCATODOS are those that have second and sometimes third jobs. These additional jobs almost always involve teaching in schools and private schools of San Pedro Sula and of Tegucigalpa.

8.4 INSTITUTIONAL AND LOGISTICAL PROBLEMS

- a. Fewer days of real academic work in BECs than prescribed in the program.
- b. Too many extracurricular activities, including teacher training done during school days. Training should usually take place during school holidays or annual vacations.
- c. Supervisors of the educational internships of the National Pedagogical University (UPN) do not see the BECs as official entities. For this reason they refuse to give permission to their students to do their internships in the BECs, even when the interns are employed there.
- d. Occasionally, videotapes reproduced by TB and given to the centers of the pilot project have been of low quality. The quality can be improved with better reproduction equipment and higher quality videotapes.
- e. A majority of participant centers have been under construction for several months. This interferes with normal school operations.
- f. The constructions have been prolonged, sometimes unnecessarily, due to the evident lack of supervision and to the non-fulfillment of contractual terms.

8.6 THE FUTURE OF TB

8.6.1 EDUCATODOS has demonstrated that TB is viable in the environment of the BECs in rural Honduras. Its expansion to other depressed and remote areas should become a high priority option. It is still to be proven that TB is viable in diverse contexts outside centers such as the BECs, but there are many BECs currently without TB. It can be anticipated that TB will be an unprecedented success, in the same way as it has happened in other countries. The videotape programs, books, and teacher training were originally designed for situations where qualified teachers did not exist. In Mexico, it has been implemented for many years as an example of distance education capable of stimulating learning processes with a facilitator of rudimentary pedagogic dexterities. We predict that TB in Honduras will similarly provide quality education at the junior secondary level in regions where highly qualified teachers may be reluctant to work.

9 Recommendations

- a. The main recommendation is to enlarge the coverage of TB to the fullest extent possible. An educational system as that in Honduras has few opportunities to achieve so much benefit with so little investment. TB, a sophisticated learning model, is, paradoxically, a system easy to apply as shown by the TB pilot effort carried out by EDUCATODOS. On the other hand, the costs of expanding TB will be much less than the usual start-up costs since many of these have already been covered. The expansion should be open to diverse sectors of society, urban as well as rural, public and private, religious and non-religious. Any expansion must consider ways of recovering the costs of reproduction and distribution of text materials and other system costs. A series of procedural manuals should be produced covering the pedagogical aspects of TB (expanding on the existing manuals and adapting them to Honduras); managerial aspects; teachers' training and "school scheduling"; directors' training and support services; relations with district manager and department heads; the use of the videotapes in the classroom; the use of the books (Basic Concepts and the Learning Guide); the use of other school materials; and linking with the community.
- b. A strategy of "Social Marketing" should be designed to encourage the various Honduran communities, educators and officials to accept alternative forms of delivering educational services, such as the TB approach. This would help TB deal with institutional attitudes and distorted individual behaviors that could interfere or even sabotage an effort to expand the program. Among other prejudices, one often hears in rural areas that "women don't require higher education," that a certain young person (man or woman) "has more than enough schooling and it is enough with the elementary education," that "at twelve a boy should already be working," or that "to take care of a husband and the kids a woman doesn't need a lot of education." Others may feel that TB is not effective because it is substantially different from traditional schools. A strategy of Social Marketing should elaborate a communications plan to change such behaviors and to prepare Honduran culture for more readily available educational services such as TB. Such a Social Marketing program would likely increase the demand for further education in rural areas.
- c. It is recommended that the small group in charge of TB within EDUCATODOS be expanded to form an Executive Unit of TB capable of doing all the things necessary to expand TB in Honduras. The minimum staffing needed would include the following: a general coordinator; five specialists (one for each curriculum area: Sciences, Social Studies, Math, Spanish and English); an evaluation specialist; a specialist in database construction and use; and an administrator.
- d. Now that TB is shown to be a high-quality educational delivery system, TB should concentrate on expanding the effort to depressed and poverty-stricken Honduran regions and localities

that have limited educational services. This will likely include areas that do not have electricity, vehicular access and health centers. Some criteria for selection of expansion sites might include the following:

1. Limited educational options for the adolescents;
 2. At least some young persons who have completed six grades of elementary education and show interest in continuing their studies at the seventh, eighth, and ninth grades in a daytime program (the EDUCATODOS interactive radio system can expand to accommodate those who are only available in the evenings);
 3. The parents of those adolescents demonstrate interest in furthering the basic education of their children;
 4. Rural conditions, with lack of services, access difficulties, poor health services, and perhaps energy availability problems;
 5. TB might be used in a context other than the BECs in areas where there are adults with at least ninth-grade education who are motivated to work as instructors in the program and who are available for training and employment. In these areas, local communities, NGOs, and others might cooperate in hosting a TB junior-secondary center, even though it is not joined to an elementary school to become a BEC (the context in which TB has been used until now). The experience of EDUCATODOS in establishing interactive radio centers in the evenings, using volunteer facilitators, will be invaluable if TB attempts to establish freestanding daytime programs;
 6. Possible employment in the area for young people with the knowledge and skills of junior secondary education; and
 7. Many school dropouts because of the lack of junior secondary school facilities. This condition, of course, exists in most areas because of the lack of such schools.
- e. For in-service training, it is recommended to distinguish among beginning, intermediate, and advanced teachers. This will make it possible to design in-service training suited to different levels of experience. The TB model uses well-defined methodologies of working with students, emphasizing the learning of clearly-defined skills and of behaviors useful in Honduran life and work. These methodologies are already in use in a good number of TB BECs, but increased teacher-training efforts will be needed with program expansion. It will probably be necessary to develop at least three training modules, one for new teachers, another for teachers with a year or two of experience, and a third one for teachers with three or more years of working with TB. These modules should be prepared in such a way that each can be used independently of the others, depending on the needs of the teacher.
- f. Teachers' meetings in TB centers that establish the "academic schedule," sometimes called the "school program," can adopt new formats to strengthen the activity as a negotiation process among the personnel at the central level and the BEC that uses TB. BEC directors should attend these administrative planning meetings. In that way, the agreements will commit the directors to assuming better-defined responsibilities in making sure the TB program is followed as agreed in the academic schedule meeting. In-service training, in turn, should be

planned to provide the highest technical quality at the lowest program cost. The more cost-effective the in-service training, the greater likelihood that it will become a sustainable activity and a permanent part of the TB program. One training strategy might be to send self-instructional modules by mail as mail service improves throughout the country. Another important channel of delivering the information to the teachers of TB might be the Internet, at least in areas where this service is available, and a TB web page should be opened on the web. This would also allow two-way e-mail communication among teachers and directors of TB centers in areas where the web is available.

- g. As for the transmission and the reproduction of videotapes, it seems that the best long-term option would be to capture the direct image of the satellite broadcast in each center so that the students and the teachers would not need to use videotape recorders. This would control to some extent the number of class days, as students and teachers would be required to attend class when the television modules are being broadcast. Unfortunately, the current daily satellite transmission originating in Mexico does not match the Honduran school year. The long-term solution, then, would be to establish permanent and reliable broadcast transmission through a channel of national coverage. In the meantime, the current system of video recorder and videotape distribution must be continued. For the time being, it is recommended that the current system of recording the programs received through EDU/SAT and their distribution by videotape be continued. In addition, there should be continued efforts to improve the reproduction quality and the timely distribution of tapes. In the current study, the main reasons for non-use of videotaped modules were that they often did not arrive on time and, when they did, they were sometimes of poor quality.
- h. As for the reproduction of TB books and manuals, some experts believe that Honduras does not have the publishing and printing capacity to produce the volume necessary (assuming dramatic program expansion) and, if there is such a capable printing company, it would have to dedicate its entire resources to reproducing TB materials. If this is correct, other possibilities should be explored for the reproduction of these texts. Currently, other Central American countries where Telesecundaria is being used are reproducing the materials using photocopiers or simple offset machines. According to the experience of Telesecundaria in Costa Rica, photocopying costs are relatively low and the quality is very similar. Another possibility is to obtain the offset plates used in Mexico and print various sections as separate books rather than in large volumes as is now the case. This would reduce the weight that students have to carry in their backpacks. Finally, we understand that Mexico has offered to sell the materials to Honduras at their cost of printing. As they print tens of thousands of copies a year in Mexico, savings of scale would suggest a very reasonable per-copy cost for those needed in Honduras.
- i. In relation to the subject areas, training is required for the English teachers, as much in methodology as in the basic knowledge of the subject matter. In addition, remedial programs

in English are needed for the students who enter the seventh grade. The use of “student portfolios” to track individual student progress, as suggested in the TB Curriculum Guide, is strongly recommended. These portfolios should incorporate information on the overall work of each student, including not only his/her academic progress, but also his/her participation in school and community activities, attendance record, demonstrated leadership, and communication abilities. These student portfolios might well substitute for the “Double Diary” currently mandated in the schools, which is resisted almost universally by teachers. Finally, a formal supervision system should be designed using formative evaluation approaches, whereby the supervisor would help the teacher and the center director improve learning and teaching. Part of the supervisor’s work would be to visit with community members, parents, and students to solicit their observations concerning the center and its work. The supervisor should also visit the classroom to observe the atmosphere and methods used.

- j. Since the TB centers require electricity to use the videotape recorders and television sets, alternative power sources must be sought for the many areas in Honduras where there is no central service. Currently, in most of these areas with no electrical service, there is little possibility for the children to continue to junior secondary school. A demonstration solar panel project should be designed in perhaps five to ten new centers of TB where there is no electricity. Solar-powered TB centers would open the doors to thousands of adolescents who would otherwise never achieve this level of education. The solar energy experts who were consulted agree that a project in a few centers is desirable and feasible at very reduced costs. The Coordinator of the Technical Team of the Office of Renewable Energy in the Sandia National Laboratories (Albuquerque, New Mexico) indicated that this group would be interested in participating in such an experimental project. They maintain a contract with USAID and are developing a project of alternative energy in the Central American region.²

² Since the original Spanish version of this report was written, a local Honduran firm, Soluciones Energéticas, has received a contract to install solar energy for two Telebásica classes in one rural Telebásica center in Comayagua.

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Calix Figueroa, J.R. (2000). Request for continuation of assistance for Telebásica. M.L.R. Secretario de Educación Pública, Mexico. Tegucigalpa, Secretaría de Educación, Honduras.

Requests a continuation of Telebásica assistance to expand beyond the 2,000 students now in the 35 Basic Education Centers served by Telebásica.

Cardenas V., H.E. Schiefelbein, et al. (1999). Gasto en formación inicial de docentes: situación actual y alternativas. Tegucigalpa, Honduras, Secretaría de Educación y Banco Mundial. 54 pp.

Looks at current costs of teacher preparation, including projections into the future, and suggests that savings are possible by exploring alternative approaches. Data were collected from April to June 1999 and cover a five-year period from 1994 to 1998. Points out that there is no integrated system of teacher preparation and that different systems exist for different levels. Explores alternatives, including: the incorporation of all teacher training into higher education whereby some teachers will be trained in private institutions at their own cost; the possible elimination of some scholarships with the idea that prospective teachers will be willing to pay for their own training if later pay is sufficient; and the provision of scholarships directly to students.

Consejo Nacional de Educación, “La Educación Básica en el Sistema Educativo Hondureño”. (Diciembre de 1996.)

Dertouzos, Michael L. (1997). *Que Será*. Editorial Planeta. Buenos Aires, Argentina.

Deweese, A. (2000). Technical Assistance Summary - Formative Evaluation. Tegucigalpa, EDUCATODOS and IEQ II. 6 pp. plus numerous annexes.

Formative evaluation plan suggests a “minimalist” approach that views the project as a unified whole rather than the sum of all of its constituent parts (curricular design, facilitator training, materials development, interactive radio, etc.) and attempts to meet the information needs for ongoing program revision and evaluation of the pilot cohort from this perspective. Suggested activities for ongoing evaluation are summarized as well as factors that affect program participation and learning (“assessing the underlying factors of program effectiveness”).

Ongoing evaluation is suggested through regular surveys of program participants, focus groups with program facilitators, and classroom observations. However, it is suggested that a single “customer satisfaction” survey, supplemented by classroom observation, be used. Entrance level tests, case studies, and in-depth surveys (to find out more about the potential audience) are also suggested.

EDUCATODOS and IEQ II. (2000). TOR Evaluación Telebásica: Application of Proposals for Consultancy. Tegucigalpa, EDUCATODOS and USAID. 2 pp.

Three-part request for proposals to do the evaluation of Telebásica. The first part requires an analysis of available data on achievement of students in the program. The second requires an evaluation of the structure, administration and cost of the program along with a projection of costs and resources to expand the program in the future. The third requires an examination of the relationship of Telebásica with other reform efforts in Honduras.

Fundación para la Educación Ricardo Ernesto Maduro Andreu, *Educación para vivir*. Proposal for Educational Reform in Honduras.

Fondo Nacional de Convergencia. (2000). Propuesta de la sociedad Hondureña para la transformación de la educación nacional. (*Proposal of the Honduran society for the transformation of national education*.) Tegucigalpa, Honduras, República de Honduras. 67 pp.

Reform suggestions made after an over-time process that involved five national meetings and many regional and local meetings. Sixteen thousand citizens and 300 organizations were involved. People were involved in 16 departments (provinces), 206 cities and towns, and around 12,000 people were surveyed, including, parents, teachers (both in-service and retired), students, educational authorities, cooperatives, city governments, hospital representatives, teachers' colleges, workers, farmers, women, churches, newspapers, political parties, mayoral candidates, human rights committees, chambers of commerce, professional colleges, ethnic groups, NGOs, police, businesses, private educational institutions, public and private universities, Red Cross emergency committees, city development committees, and others. Process included meetings, discussion, seminars, sectional meetings and other encounters.

The report is in seven parts: the first is conceptual, dealing with main trends in the process of change that are accepted by Hondurans; the second with the scenarios and life blood of the kind of society we want, principal worldwide trends in educational reform, and a diagnostic of what is needed and why in Honduras; the third section deals with how to achieve the reforms, including a concern for transversal relationships among the sub-systems, levels, modes and forms of the educational process; the fourth and fifth parts reflect the diversity of the system that includes formal, non-formal and informal; the sixth deals with preparation of teachers, management and finance; the seventh with necessary decisions to begin the process of transformation.

Godoy, O.W. and M.L. Diaz L. (1997). Participación comunitaria educación; diagnóstico comunitario. (*Community Participation in education; community diagnosis*.) Serie: Documentos de Trabajo, Documento de Trabajo no. 5. Santiago, Chile. 33 pp.

This document was elaborated in the framework of the Proyecto Intercomunal de Desarrollo de la Educación that was developed between April 1994 and December 1996, in the communes of Conchalí, Huechuraba and Recoleta. The objectives of the project were to: a) improve planning and educational administration at communal and intercommunal levels; b) formulate a plan of intercommunal educational development that balances availability and demand, optimizes the use and distribution of available resources and improve the quality of education; c) develop complementation strategies among the municipal structures and the communities that guarantees their participation in the diagnosis, elaboration and implementation of the plan; d) be a pilot for the design of local educational policies that include the coordination of communal and intercommunal educational actions with an effective involvement of the community.

Hanson, E.M. and T. Maritza Blajtrach Roldán. (1998?). La descentralización educacional: problemas y desafíos. Santiago, Chile, REDUC database. 32 pp.

With the end of military/autocratic governments in Latin America during the seventies and eighties, the emergent democracies were becoming increasingly interested in educational decentralization as a form of improving administrative services, increasing the quality of education, sharing power with the local citizenship and accelerating the rhythm of national development. This change coincided with a world movement that embraced federal government systems (as those of Argentina, India, Nigeria and United States) as well as unitary systems (as those of Colombia, Pakistan and Papua New Guinea), also in large countries (as Australia, Canada and Spain) as in the small ones (such as El Salvador, Mali, Nicaragua and Zaire).

The understanding of the different variables and processes that configure these reforms is not easy. Using key questions as a way of organizing the presentation of the theme, this document identifies and explains the problems, objectives, processes and fundamental strategies in the initiatives of educational decentralization in Latin America. Also, problems and obstacles associated with the processes of decentralization are analyzed, particularly in their relationship with the political, financial, and institutional problems involved in offering quality education.

Harris, A. (2000). Trip Report 31 May-14 June 2000 (consultant, student achievement), Tegucigalpa, IEQ/EDUCATODOS. 19 pp.

Describes work with: UMCE (Marta del Carmen Diaz) at the National Pedagogical University in helping EDUCATODOS with exams and evaluation procedures; Roy Portillo, local officer in charge of evaluation of curriculum; and the evaluation unit of EDUCATODOS (Esdra Maria Zelaya). Several interesting models of test items and formats included.

M&F Consultores. Ventajas de la educación a distancia en un mundo globalizado. Gascón 361 - P.B. "I" - (1181) Capital Federal – Argentina. Tel/Fax: (+54-1) 983 3613. E-Mail: scio@cvtci.com.ar

Menotti, C.E. (probably 1994). Diseño de un proyecto experimental, como alternativa para elevar la calidad de la educación básica en las áreas rurales (escuelas con docentes multigrados). (*Design of an experimental project, as an alternative for increasing the quality of the basic education in rural areas (schools with multigrade classrooms and teachers).*) Panama City, Panama.

Gives an interesting history of education in Panama through the early nineties, with the various financial, administrative and planning issues of the period. Also deals with repetition and wastage, and other data that support the idea of small schools with multi-grade classes and one or two teachers.

Oficina Regional de Educación para América Latina y el Caribe de la UNESCO. (1994). Medición de la calidad de la educación básica: Resultados de siete países. (*Measuring of the quality of basic education: results of seven countries.*) Santiago, Chile, OREALC (UNESCO). 69 pp.

This is the third volume in a series. The first volume of the series, *Measuring the quality of education: why, how and what?* (1992), is a theoretical discussion that considers why we wish to measure quality. In the second volume, *Instruments for measuring the quality of the education*, methodological instruments are described. Volume Three, *Measuring the quality of education: results*, summarizes the results of the investigation on new dimensions of quality of education in Latin America and offers proposals for improving it.

In this third volume, achievement levels in Spanish and math in fourth grade in seven countries of Latin America and the Caribbean are explored. The achievements of the children are combined with a series of factors, including not only the school but also the family environment, showing the elements that most influence the progress of the children.

The final analysis was done by Violeta Arancibia and Ricardo Rosas of the Social Sciences Faculty of the Catholic University of Chile who had the collaboration of a team that included Hernan Serrano C., Katherine Strasse, María Elisa Rodríguez, María José Mezzera, Ximena Aguayo and M. Soledad Gálvez.

Perraton, Hilary. (2000). *Open and Distance Learning in the Developing World*. Routledge London and New York. 228 pp.

A fine review of distance education projects throughout the world for the past half-century or so. Has chapters that compare the costs of the various radio and television-based education programs

worldwide at all levels, their infrastructure, in-service training elements, their apparent effects, and problems faced. EDUCATODOS in Honduras (at the primary level) and Telebásica in Mexico are both discussed in the context of other similar efforts. Discusses why many of these efforts have not survived the test of time.

Prawda, J. (1992). *Educational Decentralization in Latin America: Lessons Learned*. Washington, DC, Human Resources Division, Technical Department, Latin America and the Caribbean Region, World Bank. 56 pp.

This paper describes some of the financial, efficiency (wastage), quality, and equity changes which occurred during the educational decentralization process in Argentina, Chile, Colombia, and Mexico in the eighties through early nineties.

The data collected show that there are obvious discrepancies between what educational policy makers preached and what was practiced through decentralization. Financial, efficiency, and power distribution arguments were the main thrust behind the reforms. Yet, for example, basic education financing continues, in general, to rely heavily on central Government resources.

The evidence gathered seems to suggest that management styles do not necessarily condition the reduction of educational flow wastage (repetition and dropout).

Quality of education did not improve during the decentralization process, and the gap between the better-off and worst-off schools actually widened.

Management of the educational sector was strengthened in countries where policymakers and senior government officials periodically monitored the decentralization process and provided support as required. Countries lacking the above weakened their educational governance capacity during the reform process.

Quiroz, J.A. and R.A. Chumacero. (1996). *El Costo de la Educación Particular Subvencionada en Chile. (The Cost of Subsidized Private Education in Chile.)* Santiago, Chile, La Federación de Instituciones de Educación Particular (FIDE), la Corporación Nacional de Colegios Particulares (CONACEP), y GERENS (Economía, Finanzas y Gestión). 32 pp.

Subsidized private education has been considered an attractive option of education for 32% of Chilean homes. If compared with state education, it is found that important differences exist in terms of school performance, besides requiring less state expenditure. At the same time, it is observed that a growing preference exists on the part of the Chilean homes to choose this education mode to government schools.

A survey carried out in subsidized private schools reveals that at the present time the great majority of them is not able to cover total costs and they are dipping into capital to cover expenditures. The situation is particularly serious in the case of the secondary education, where operational margins are tighter than in the basic education. It was also found that schools that run both morning and afternoon sessions had a better chance of covering costs than schools running a single session. However, the government had been proposing a regulation requiring all such schools to fund only a single session.

Remeseira, Claudio. (1997). *Turbo capitalismo global. Informe especial, Revista Apertura, Edición N°66. Marzo 1997. Buenos Aires.*

Reyes, J. and D. Rock. (1999). *Informe de Resultados: Evaluación de Medio Término, Proyecto de Mejoramiento de la Educación Básica. (Report of Results: Mid-Term Evaluation, Project of Basic Education Improvement.)* Tegucigalpa, World Bank, Secretaría de Educación, República de Honduras. 119 pp.

Evaluation of a World Bank project to improve primary education in Honduras, in operation since 1996. The objectives are to improve achievement, lessen dropout and repeater problems, improve poor quality because of limited time in the classroom, absenteeism, limited material resources, inadequate curriculum and other factors.

The project included help for six kinds of training:

1. Centers of Educational Learning (CAD)
2. Pre-service Training (teachers' schools)
3. Program of Continuous Formation (PFC)
4. Training of Directors of School and District Supervisors
5. The National Training System of INICE
6. Program of Parents' Mothers and Teachers training (PROHECO)

The project also intended to provide textbooks, teacher manuals and other teaching materials by using the IEQ (USAID-financed) project materials (EDUCATODOS). Other elements of the project provided resources for student achievement evaluations (primarily through UMCE of the National Pedagogical University), improvement of physical facilities in rural areas, institutional strengthening of administration by decentralization and teacher incentives, restructuring investment by encouraging local communities to take initiative (Programa Hondureño de Educación Comunitaria (PROHEC)). The project was administered under a unit in the Ministry of Education where monitoring and evaluation are also placed.

Most elements were not going well. Recommendations suggested further strengthening of departmental (provincial) resources (both human and material), greater strengthening of training resources, improve delivery of educational materials and training to use them, pre-service training reform, more curriculum reform and the setting up of libraries in schools.

The report suggests that there has been a loss of credibility in the institutional management of the project and that much needs to be done to strengthen program management, monitoring and evaluation.

Secretary of Public Education (Honduras), Press Release, #000434, July 1999.

Secretary of Public Education and C.G.d.E. Telesecundaria. (1999). Elementos de reflexión para mi práctica docente. Mexico, D.F., Secretaría de Educación Pública, Secretaría de Relaciones Exteriores, Organización de Estados Americanos.

A compilation for training teachers involved in the Telesecundaria network in Central America. Donated under the direction of Early Beau Buenfeld Baños. Includes: articles on adolescent development, current pedagogical trends (conductism, cognitivism, humanism, genetic theory [Piaget], socio-cultural theory [Vigotsky]); and chapters on evaluation (including formative) and instructional uses of video.

Describes the five stages of a typical Telesecundaria lesson in the Guide to Learning: Title (getting attention); Subtitle (explains and clarifies); Instructional intent (gives the basic educational intent of the lesson); Television program (encourages active observation and analysis and evaluation of the messages); Remember (a summary of key concepts earlier presented); Reading assignment in the book of Basic Concepts).

Secretary of Public Education (SEP), Mexico D.F. (1996). Acuerdo de cooperación técnica en materia de educación a distancia entre la Secretaría de Educación Pública de los Estados Mexicanos y los

Ministerios de Educación de Belice, y las Repúblicas de Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua y Panamá. (*Agreement of technical cooperation regarding education at distance among the Secretary of Public Education of the Mexican States and the Ministries of Education of Belize, and the Republics of Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama.*)

Spaulding, S. (1999). Trip Report December 7-12, 1999 (IEQ Consultant, Evaluation of Telebásica), Tegucigalpa, IEQ/EDUCATODOS. 15 pp. plus annexes.

Spaulding, S. (2000). Relevant questions to be addressed during the first stage of data collection for Telebásica's evaluation. Tegucigalpa, EDUCATODOS, Secretaria de Educación y USAID. 2 pp.

A list of information and data that will be needed for the evaluation of TELEBÁSICA. Most of the information probably exists but needs to be collected and analyzed.

Spaulding, S. (2000). Trip Report June 25-July 15, 2000 (IEQ Consultant, Evaluation of Telebásica), Tegucigalpa, IEQ/EDUCATODOS. 26 pp.

Telebásica. (1999). Memoria de Telebásica Hasta el Año 1999. Tegucigalpa, Unidad de Telebásica en el Programa de EDUCATODOS. 11 pp.

Telebásica. (2000). Training charts of Telebásica during the period between January 1999 and June 2000. Tegucigalpa, EDUCATODOS/ Telebásica. 1 p.

Lists five training sessions: 24-29 January 1999 (58 participants) to introduce Telebásica approaches and methods; 21-25 June 1999 (96 participants) to reinforce specific elements of the model, how to plan the curricular calendar and how to evaluate; 21-13 October 1999 (58 participants) to reinforce elements having to do with the relationship with the community and to evaluate progress so far; 23-28 January 2000, how to improve performance in light of the first year's experience, to encourage school directors to participate in Telebásica and to plan the curricular calendar for seventh and eighth grades; and 21-25 May 2000 (122 participants) to discuss use of instructional resources, the importance of evaluation of achievement and formative evaluation, how to evaluate and complement the curricular calendar, how to plan for the year ways of demonstrating what has been learned and how to integrate with the community.

Does not include the Seminario-Taller Sobre La Metodología de Telebásica para los Directores Distritales, held July 13-15 2000, to prepare district school directors to understand the Telebásica program.

Unidad Telesecundaria and Coordinación General para la Modernización Administrativa de la Educación, Coordinación General: Rogelio Mata Cortés, Natanael Carro Bello. Supervisión: María Guadalupe Fuentes Cardona (1998). Curso de Capacitación de Maestros de Nuevo Ingreso al Servicio de Telesecundaria. (*Training Course for New Telesecundaria Teachers.*) México, D.F., Secretaría de Educación Pública: 169. ISBN 970-18-1949-7.

Gives the history of the Telesecundaria effort, including the abandonment of the integrated curriculum practiced until the early 90s (pp. 65-70) in favor of subject-oriented curriculum more in tune with secondary education requirements. A manual for the training of teachers in the Acuerdo de Cooperación en Materia de Educación en Distancia signed with all Central American countries.

Van Steenwyck, N., M.D. Perez, et al. (1998). Mid-Term Evaluation: EDUCATODOS: Executive Summary (USAID Contract No. 522-0388-C-00-6190-00). Tegucigalpa, Secretaría de Educación, United States Agency for International Development. 16 pp.

An evaluation of EDUCATODOS over a three-year period, 1995-1997. Annual incomes of participants have increased by an average of \$40 for each additional year of education they have obtained through the program.

The cost of each additional person/year of schooling obtained through EDUCATODOS is approximately \$28, while the cost per person/year through traditional schools is \$100 (grades one through nine).

The program targets adults from 14 to 29 years, rather than the older adults traditionally attracted by non-formal education programs. Further, the program is an “alternative basic education delivery system” that provides access to the formal education system. About 70,000 are enrolled annually, with 41% of the total enrollment in EDUCATODOS Learning Centers using Interactive Radio Instruction (IRI), 22% in Primary Education Night Classes (Primaria Acelerada), 26% in Secretary of Education literacy programs (Educación Funcional), and 11% in programs run by private voluntary organizations.

In 1997, the average age of participants in the Learning Centers was 28, 50% were females, and 5% were from indigenous groups. Participants had an average income of \$18 per month and had achieved an average of 1.9 years of schooling upon enrolling in the program.

Remaining challenges are to: 1) improve efficiency, reduce dropout rates and reduce costs per graduate; 2) develop texts and related educational materials for levels 7-9 and establish mechanisms for reprinting, sale and distribution of educational materials; 3) increase the participation of PVOs, municipalities, employers and other entities as sponsors of EDUCATODOS; 4) institutionalize the program under the new structure of the SE; 5) overcome administrative bottlenecks that are affecting project implementation.

Van Steenwyck, N. (1999). Retención, aprobación y eficiencia global del séptimo grado, con y sin Telebásica. Tegucigalpa, EDUCATODOS, Secretaria de Educación, y USAID. 5 pp

Compares retention and pass rates for 1997 in seventh grade of “Centros de Educación Básica” without Telebásica with retention and pass rates for 1999 of centers using Telebásica. Examines enrollment at the beginning of the year with numbers finishing at the end of the year, but does not look at the dropout rates between 7th and 8th grades. About one in every five 7th grade students drop out during the year, whether using Telebásica or not. This is the highest of any grade of basic education, grades one through nine.

In terms of passing the grade, 85% passed without Telebásica while only 66% passed with Telebásica. Nonetheless, the pass criteria for the Telebásica groups were not the same as the non-Telebásica groups. The teachers decide who should pass in the non-Telebásica groups while the pass rate for Telebásica students is based on standardized tests given at the end of the 1999 school year (minimum of 60% correct to pass).

Difference is noted in failure rates in the various disciplines. Failure rates in the non-Telebásica centers are around twice what they are in Telebásica centers. Nonetheless, efficiency could be improved in both Telebásica centers and non-Telebásica centers. There is a great range among centers, suggesting that the teacher is a critical factor in efficiency.

Van Steenwyck, N. (2000). Costos de la educación en Honduras. (*Costs of education in Honduras.*) Tegucigalpa, Honduras, Secretaria de Educación/EDUCATODOS. 9 pp.

Projects from the years 2000 through 2010 the costs of achieving the following: 100% access of five-year old children to pre-school education; 90% of those entering labor force with complete primary education (through sixth grade, eleven years old); 80% of children in “third cycle” or grades seven through nine; 50% of those entering labor force (16 years old) with complete secondary

education (grades 10 through 12); increase in higher education graduates by 100%; reduce illiteracy to 10%; through alternative forms of education, raise educational levels of the labor force by 1,000,000 person years of education (“escolaridad”). Suggests basic facilities and special attention to dropout problems and increased population. Also suggests preparation of in-service teacher trainers (50), additional teaching materials, standardized tests and other reforms. Additional costs for the ten years (2001 through 2010) are estimated at \$344,650,000 if all suggestions are accepted.

Vargas, J.S. (probably 1997). Mercado, competencia y equidad en la Educación subvencionada. (*The market, quality and equity in subsidized education.*) Santiago, Chile, Red Latinoamericano de Documentación e Información en Educación (REDUC). 12 pp.

Studies the apparent effect of the market, decentralization and school subventions on educational equity and quality in Chile. Since 1980, school subventions are the same for public and private schools, and reflect demand in that parents select the schools, public or private, to which they send their children. The subventions are, in essence, incentives, according to the author, if they are used properly can raise both equity and quality; if used improperly, quality and equity may suffer.