


1973

# Let Jorge Do It: An Approach to Rural Nonformal Education

James Hoxeng

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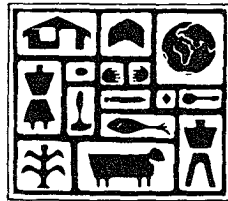
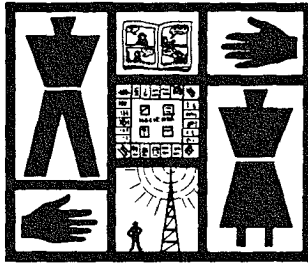
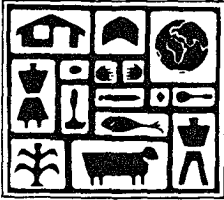
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**LET JORGE DO IT:  
AN APPROACH TO RURAL  
NONFORMAL EDUCATION**

by  
James Hoxeng

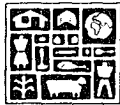


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LET JORGE DO IT: AN APPROACH TO RURAL  
NONFORMAL EDUCATION

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NONFORMAL EDUCATION

JAMES HOXENG



Center for International Education  
University of Massachusetts  
Amherst, Massachusetts  
1973

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## FOREWORD

The publication of this work marks the end of the first phase of a project to develop a new approach to rural, nonformal education in Ecuador. While there have been working documents and an ongoing series of Technical Notes, this is the first detailed statement of the project's philosophy, and a description of the wide variety of experimental activities that took place during the first two years of the project. The Author has succeeded in conveying the historical process of evolution by which ideas and beliefs were tested and new ideas emerged from the testing. The project grew as an organic whole and is the product of a group of people, both Ecuadorean and North American, who shared a common set of beliefs and goals.

The project is unique in a number of ways: the immediate appointment of an Ecuadorean as director, the predominantly Ecuadorean staff in the field, the inductive, evolutionary process used from the start, the very real input from campesinos in terms of both ideas and leadership roles, and most importantly, the basic ethic of participation by the people for whom nonformal education was being created. This last aspect is a central theme and is reflected in the title of this book. The author, James Hoxeng, was from the start a major resource who articulated his firm belief at every step that Jorge could in fact do it. When bureaucratic pressures or convenience would tempt the project staff into doing things 'for Jorge' the author was there to keep us honest and force us to confront the discrepancy between our beliefs and our actions.

One of the most valuable aspects of this document is to indicate with a variety of specific examples the extent to which Jorge was in fact able to do it--and did so. If this represents a general pattern, then there are major implications for local, national, and international agencies as they go about the business of development. Whether this is just a series of special cases remains to be seen. Issues of charismatic leadership and the duration of enthusiasm which a small group generates over a short time need to be resolved. As the project moves into a consolidation phase, it will face the difficult challenge of finding institutional homes for programs or other forms of self-support. Two years from now we may have a better idea of the large scale potential of these approaches.

In sharing our ideas with many individuals in various development agencies around the world, considerable enthusiasm and interest has been evoked. In some cases people have been inspired to create parallel approaches for situations in which they were involved. We also hope that the basic philosophy expressed here will have some influence on the general field of nonformal education, much of which is really formal education in everything but name. We believe that the greatest potential of nonformal education lies in an approach which motivates and then truly does 'let Jorge do it.'

David R. Evans  
Amherst, Massachusetts

## ACKNOWLEDGEMENTS

The Nonformal Education project in Ecuador is the work of a number of outstanding people, each of whom has contributed substantially to defining and working out nonformal education ideas and techniques. In a sense they are the book's cast of characters.

Patricio Barriga was to our knowledge the first "host-country national" to direct a USAID-financed university project. His performance has been of such a high quality that it seems certain he will not be the last such director. Enrique Tasiguano brought both charisma and in-depth knowledge of rural Ecuador to the project. Being a campesino he can communicate with campesinos in a way no outsider could hope to match. Amparo Borja and Jose Enrique Toaquiza showed skill and flexibility as they handled assignments in training, materials production, administration and the writing of case studies. New staff members are also showing the kind of resourcefulness and creativity that has become a project trademark.

UMass students and faculty have played an equally important role in the project's development. David Evans has been the major faculty bulwark in his capacity of Principal Investigator; Bill Smith has participated in all facets, from the initial contact through materials development responsibility to his present Administrator position. John Bing as Coordinator showed great ingenuity and patience with his fellow men matched only by that of Cookie Bourbeau, the project's lynchpin in her Administrative Assistant role. Numerous other Fellows of the Center for International Education and other



members of the School of Education took part, all of us amateurs in the world of nonformal education.

AID officials in Ecuador and in Washington provided solid support and the latitude necessary to give new ideas a chance. Jon Gant, Dick Greene, and Jim Frits have been involved with all aspects of the project's initiation and development.

Officials of Ecuador's Ministry of Education were involved in dialog with the UMass staff from the beginning. We received constant support, especially from Servio Tulio Moreno, and from his successor as head of the Department of Adult Education (now the Department of Educación Extra-Escolar) Carlos Poveda.

Finally and perhaps most important, the Ecuadorians involved in non-formal education who consented to use our ideas, to improve on them and to unfailingly treat us with courtesy and patience, were the people who really made the whole thing possible: the facilitators of all generations, Padre Isaías Barriga and the Auxiliares of Radio Mensaje; Marcelo Troya, Carlos Moreno; and especially the campesino leader whose name I borrowed for the title, Jorge Freire Benalcazar. Saludos y gracias a todos.

James Hoxeng

## ABSTRACT

### Let Jorge Do It: An Approach to Rural Nonformal Education

In the Nonformal Education in Ecuador Project, we set out to create materials and processes which would operationalize some of the emerging tenets of nonformal education.

#### Project Design

1. We developed learning materials usable by nonprofessionals. These materials concentrated on literacy, math, and consciousness-raising. Most of our effort went into development of games, which oblige participation and encourage dialog.

2. We made agreements with six organizations to use the materials with our assistance. These included the Department of Adult Education, a cooperation federation, an Ecuadorean volunteer organization, a training organization, community groups, and a radio school program. About a dozen other groups made use of the materials on their own after an initial demonstration. We then monitored the use of materials and results obtained in the course of the year.

#### Conclusions

We have reached the following conclusions after the first year of the

## Ecuador Nonformal Education Project\*

A felt need for literacy is a sufficient motivating force to bring a portion of the people in a campesino community together for daily meetings for a period of several months.

Campesinos without extensive training can conduct meetings of their peers, and are acceptable to them as "facilitators" who eschew traditional leadership behaviors.

Rural populations have little difficulty entering into dialog and reflection on topics that arise from their literacy exercises.

The combination of literacy and dialog facilitates movements of these groups towards development planning and to action on concrete projects.

Not only the facilitators but also other participants in the classes can change their behavior vis-à-vis authority figures, becoming more efficacious in their dealings.

The above process is aided by games to reinforce learning, to conceptualize relationships, and to break down stereotypical images of the learning situation.

Facilitators can design and run training courses for campesinos from other communities, thus creating new cadres of facilitators.

The dialog concept can be technologically extended to radio schools through the use of cassette tape recorders as a feedback device, allowing participants freedom to decide what they wish to do with the recorder. This seems to have some effect on self-image.

Organizations and individuals involved in development education are open to new ideas and techniques, and will pick up on them for use in their own programs without external incentives.

### Implications

1. Basic educational needs in rural areas of the third world can be satisfied by non-professional educators using materials which promote participation and dialog.

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\*Caveat: All the conclusions and implications listed above are offered with considerable caution. We are still at a very early stage of a very diffuse situation--and we aren't even into all of Ecuador yet.

2. A combination of campesino federations, coops, radio school, and other institutions can lead to the formation of a complementary national network of learning situations, each institution serving different populations at the basic education level, and building on basic learning with specific information and skills pertinent to the institutions goals and the campesinos' choice of activities in which they want to participate.

These conclusions and implications will be of interest primarily to an audience already involved in development education activities in the third world. Program administrators and ground-level practitioners should find it a compendium of useful ideas--some of them fresh, others simply new variations of existing approaches.

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LET JORGE DO IT: AN APPROACH TO RURAL  
NONFORMAL EDUCATION

## CHAPTER I

### EDUCATION: RHETORIC VERSUS REALITY

Education suffers basically from the gap between its content and the living experience of its pupils, between the systems of values that it preaches and the goals set up by society, between its ancient curricula and the modernity of science. Link education to life, associate it with concrete goals, establish a close relationship between society and economy, invent or rediscover an education system that fits its surroundings--surely this is where the solution must be sought.

--Edgar Faure, et al.

Learning to Be

Paris: UNESCO, 1972, p. 69.

Synopsis for those who've read all the figures they can stand on problems of schooling in the third world: Ecuador, like other third world countries, is making a prodigious effort to educate its entire population. The results, especially in rural areas, are disheartening.

#### Prodigious Effort

Third world countries are devoting substantial percentages of their national budgets to education. Ecuador is among the leaders in this effort.<sup>1</sup> In 1972 its budget

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<sup>1</sup>Most of the statistics in this paper will refer to Ecuador, because the paper is about Ecuador. Readers may relate this to other realities with which they are acquainted.

for public education amounted to 4.7% of GNP, or 25.01% of the national budget.<sup>2</sup> This might be described as a heroic effort, since in 1968 education's share was only 15.78%,<sup>3</sup> and the average expenditure on education in developing countries is only 3.6% of GNP.<sup>4</sup>

Most countries of the third world, Ecuador among them, have as a stated goal universal primary education by 1980. Urged on by UNESCO, they have since the early sixties made increasing efforts to expand their educational offerings. The mean annual increase in public educational expenditure from 1960-68 in Latin America was 11.3%.<sup>5</sup> Enrollment during that period increased at an annual rate of 6.2%.<sup>6</sup>

Most of the resources spent on education go to increase formal schooling opportunities. Adult education's portion of the Ecuador education budget is less than 1/2 of 1%.<sup>7</sup> Primary schools claim about 42%, with secondary schools, universities, sports promotion, cultural extension, planning

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<sup>2</sup>Plan Quinquenal de Educación Funcional de Adultos, 1973-77 (Quito: Ministry of Education, July, 1972), p. 34.

<sup>3</sup>Ibid.

<sup>4</sup>Faure, et al., Learning to Be, p. 287.

<sup>5</sup>Ibid., p. 45.

<sup>6</sup>Ibid., p. 282.

<sup>7</sup>Plan Quinquenal, p. 35.



and administration splitting the rest.<sup>8</sup>

#### Gap between Resources and Needs

##### Dropout Rate

Unfortunately this spending effort has not made schooling available to everyone, as promised. The Plan Quinquenal admits that about 20% of the 6-12 age group are not in school, and that of those who begin primary school, only 28.1% finish the obligatory six grades. In fact, nearly half are gone by the end of second grade.<sup>9</sup>

##### Unemployed Teachers

Students are not the only people left unsatisfied by the system. In 1971-72 there were more than 10,000 teachers out of work in Ecuador, and among new graduates seeking posts, only 160 out of 1,000 would be lucky enough to find employment.<sup>10</sup> Out-of-work teachers have begun to organize in an attempt to form a pressure group, and the National Union of Educators has recently demanded that the government apportion 30% of its budget for education.

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<sup>8</sup> Erickson, et al., Area Handbook for Ecuador (Washington, D.C.: U.S. Government Printing Office, 1966), pp. 161-62.

<sup>9</sup> Plan Quinquenal, pp. 19-20.

<sup>10</sup> "Hay mas de diez mil profesores sin cargo," El Comercio, Sept. 2, 1971.

## Lack of Schools

School construction is another area in which the gap between resources and need is painfully evident. The United States Agency for International Development entered into a loan program with the government of Ecuador in 1965, to "increase the quantity and quality of primary education available in Ecuador."<sup>11</sup> Specifically this was part of a plan to increase functional literacy to 80% by 1973. The loan was to finance the construction of 3,000 classrooms by August, 1969. In December, 1971, only 748 had been constructed, and the projection was that less than half the originally projected classrooms would be completed when the loan is completely disbursed in December, 1973.<sup>12</sup>

The report made clear that the major difficulty was the inability of the Ecuadorian government to fulfill its monthly obligation of \$66,700 ("counterpart contribution"), having instead contributed a monthly average of \$13,200.<sup>13</sup>

To further exacerbate the situation, the country's growth rate has made even the originally projected number of classrooms inadequate. The report concludes that to overcome the classroom deficit using the above program it

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<sup>11</sup> Henry Miles, et al., Evaluation Report on the Primary Education Project (Quito: USAID, 1972), p. 11.

<sup>12</sup> Ibid., p. 12.

<sup>13</sup> Ibid., p. 25.

would be necessary to spend \$9,000,000 annually for ten years, whereas the Ecuadorian government has had serious difficulty contributing \$159,000 annually. Annual expenditures would have to be increased by more than 5,500%.<sup>14</sup>

If the exploitation of petroleum resources produces a bonanza economy in Ecuador, perhaps such an increase is not impossible--that remains to be seen.

#### Nonformal Education Opportunities

In 1965-66, 7,491 persons were reported to have received some kind of informal work-related training.<sup>15</sup> The majority of these were sponsored by private enterprise, with some input from the Ecuadorian government and external agencies. The courses were on such subjects as accounting, mechanics, languages, tailoring, publicity, secretarial training, and so on--the normal run of short courses for the wage sector.

Since 1966 the pace of this kind of training has picked up. SECAP, the Ecuadorian Service for Professional Training, has recently begun to operate with a budget based on a 1/2% payroll tax collected from companies operating in the country (similar to SENA in Colombia and to several

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<sup>14</sup> Ibid., pp. 1, 3.

<sup>15</sup> Junta Nacional de Planificación y Coordinación, "Plan Ecuatoriano para el Desarrollo de los Recursos Humanos" (Quito, 1970), pp. 82-83.

other state-affiliated training agencies in other Latin American countries). SECAP plans to hold 748 courses during 1973. Most of these will serve the industrial sector, but 77 are aimed at agribusiness.<sup>16</sup>

Other organizations have recently come into being for the purpose of training. Among these the Executive Center brings in international experts of the caliber of Peter Drucker to conduct courses for middle-and-high level management. A private Ecuadorian consulting firm, CEMA (Centro de Motivación y Asesoría), provides courses in human relations, achievement motivation, and organizational development. The Ecuadorian Center for Family Education gives courses related to family planning. The Summer Institute of Linguistics provides training for Indian "community teachers" who live and work primarily in the indigenous communities of Ecuador's Amazon jungle area.

It is safe to say that the number of persons taking part in nonformal education in 1973 is considerably greater than was the case in 1966. Fifteen thousand might be a safe estimate.

Numerous analysts are convinced that nonformal education holds the key to the solution of third world education problems. Later in the chapter we shall examine what it

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<sup>16</sup>"748 cursos dictará el SECAP durante 1973," El Comercio, Jan. 9, 1973.

means for rural Ecuador.

### The Rural Situation

We now come to the major emphasis of this chapter, and the takeoff point for this study. In Ecuador there are two virtually separate cultures, urban and rural. The national statistics quoted in previous sections tend to mask the astonishing difference that exists. 61.4% of Ecuador's population is rural, but 86.5% of Ecuador's illiterates live in rural areas. A large portion of the remaining 13.5% were probably recent immigrants to the cities when the census was taken.

Figures on schooling show similar disparities.<sup>17</sup> The primary school "rate of retention" in urban areas from 1962 through 1967 was 55.34%; i.e., that percentage of those who began school completed six grades. During the same period the retention rate in rural areas was 13.14%. This does not take into account the number of children who never begin school. There are no reliable figures on this, but a safe estimate might be that over 1/4 of rural children never begin school, while in urban areas, the vast majority at least begin school.

The difference in middle schools and universities is

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<sup>17</sup>Unless otherwise noted, the statistics cited in this section are taken from the Plan Quinquenal, loc. cit.

even more extreme. UNESCO figures released in honor of the World Day of Literacy in 1971<sup>18</sup> estimated that of every thousand students in middle schools, 26 in Colombia; 38 in Costa Rica; 66 in Chile; and 39 in Panama were from rural areas. University enrollments are more extremely divided. Of every thousand university students, 1 in Colombia; 8 in Costa Rica; 2 in Chile; 6 in the Dominican Republic; 2 in Ecuador; 1 in El Salvador; 1 in Honduras; and 3 in Panama are from rural areas.

Another consideration is the difference in quality between urban and rural schools. The number of years offered in rural schools is often no more than two, perhaps three, instead of the six years which constitute full primary education. School buildings are old or of inferior construction. Textbooks and classroom materials are often in woefully short supply.

Much of the primary school curriculum is generally acknowledged to be irrelevant for rural populations. This is admittedly a factor in urban migration: those who are successful in school are qualified only for work in urbanized areas. This is caused of course by the fact that the curriculum is standardized, and urban concerns hold sway, so an urban-oriented curriculum is exported to rural

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<sup>18</sup> "UNESCO insta a buscar nuevas estrategias en favor de la educación," El Comercio, Sept. 12, 1971.

areas.

The situation is further outlined by Ladislav Cerych:

The straightforward development of rural education can in fact only aggravate the situation. If the child of a peasant receives at the village school the same type of education as that given in the towns, or worse still one modelled on the advanced countries, he or his parents will soon be faced with a fatal choice: either he will leave the school because, in his eyes, it is of no practical value (hence the high wastage in rural zones) or he will stay in school, regarding it as a means, sooner or later, of escaping from the rural surroundings.

One thing . . . seems certain: rural education in most developing countries makes no contribution to social betterment within the agricultural milieu, which will for a long time be that of the majority of the population. . . .<sup>19</sup>

Moving outside the school system, similar discrepancies prevail in nonformal education. There are again no reliable figures regarding the percentage of Ecuador's rural populations which have access to the primary school equivalency program of the department of adult education, but personnel of that department's statistical division say frankly that their efforts are concentrated primarily on urban areas and small towns. The most rural areas are commonly found without either a school or an adult education center.

There are many good reasons for this, of course: the

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<sup>19</sup> Ladislav Cerych, Problems of Aid to Education in Developing Countries (New York: Praeger Publishers, Inc., 1965), p. 23.

population in rural areas is spread over a wide area, making it difficult to attend regularly at any central point. Teachers, whether in the formal system or in adult education, are reluctant to live in remote areas, and generally do so only if it is required as a form of indenture. There is no denying that life in the campo is difficult for one accustomed to city living. Many of the young teachers in rural areas experience health problems stemming from the inferior sanitary conditions and the limited diet available. They miss many classes, retreating whenever possible to the relative comfort of the towns.

The dropout rate in adult education centers is high. In any given year, between 40% and 70% of those who begin do not finish the six-month curriculum.<sup>20</sup> UNESCO's Ecuador Functional Literacy Pilot Project found similar problems. The high dropout rate, high level of absenteeism, and failure of participants who completed one level of the course to show up the next term for the next cycle<sup>21</sup> were listed as the Project's major difficulties.

It is worth noting here that the adult education program and the UNESCO pilot project, although they are

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<sup>20</sup>Unidad de Planificación del Departamento de Educación de Adultos, 1968-69 figures.

<sup>21</sup>Proyecto Piloto de Alfabetización Funcional de Adultos: Evaluación Preliminar (Quito: UNESCO, April, 1972), pp. 5-6.



officially called nonformal education, are in fact based completely on the school model. It can be argued that this is the source of many of their problems. We shall come back to this point later in the chapter.

Other nonformal education opportunities likewise are weighted in favor of urban areas. A count of informal training courses listed in the Plan Ecuatoriano para el desarrollo de los recursos humanos shows that except for 96 persons who received training in cooperativism, all of the 7,491 persons were trained in skills really applicable only in the urban sector.<sup>22</sup> Even with the burgeoning number of nonformal training courses in recent years, it is safe to say that the ratio hasn't changed much. Further, courses offered for the rural sector tend to be in the use of heavy machinery, or of modern farming techniques based on the United States model--thus serving best those in the rural sector who already have the most.

In summary, most privately-sponsored nonformal education is set up with one major goal: to train people in skill areas needed by urban employers. This is not bad in itself, but it is not a useful model for rural areas. Having campesinos gain skills is of no interest, since there is virtually no skilled salaried employment in the campo.

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<sup>22</sup>Plan Ecuatoriano, pp. 82-83.

Response to the Problem of Education  
in Rural Areas: Increased Selectivity?

At first glance, emphasis on sectors where one is most likely to achieve some kind of success seems inevitable and reasonable. Bureaucracies function that way, and it makes no sense to beat one's head against the wall. One can reassure himself by saying the new ideas and methods will eventually disseminate to more remote populations, but experience shows that more favored sectors begin to progress even more rapidly vis-à-vis the backward areas--much as the developed nations continue to develop at a faster rate than the third world countries.

Increased selectivity, whether intentional or inadvertent, of course makes sense in the context of the schooling model. One conclusion of UNESCO's preliminary evaluation was the need to be more selective in deciding who should have the right to participate, and to concentrate on those centers whose programs were going well (which tended to be in the more urbanized areas).<sup>23</sup> The pilot project's centers would have functioned more smoothly if the seriousness of participants were closely checked beforehand. The dropout rate would have been drastically reduced if no one were admitted except those prepared to sign an affidavit that they would continue for three years.

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<sup>23</sup>Proyecto Piloto, p. 49.

And attendance would have been better if centers were only located in areas of a higher population density, so that students would not have to walk more than a kilometer each way. However, the logic is clear: those who are now ignored by the system and para-system would continue to be ignored.

The University of Massachusetts' Nonformal Education Project has addressed itself to the problem of those ignored by the system, especially in rural Ecuador. The following chapters describe how the project has produced and tested various mechanisms which have in common the aim of making universal basic education possible on a non-selective basis without new bureaucracy, without extensive use of professional staff, at low cost, and with a voice retained by the people as to what they study and how they do so.

## CHAPTER II

### THE PROJECT'S ORGANIZING IDEAS

Our project<sup>1</sup> set out to explore the possibilities for rural education at the opposite end of the spectrum from the relatively expensive formal system of education. A number of basic principles guided our early decisions about what we would try to do and the methods we would choose to experiment with.

#### Action Orientation

Because we were planning to put together materials and delivery systems that followed no existing pattern, it was clear at the outset that before we could mount a sophisticated research effort we had to first check the gross variables reflecting success or failure: Would the communities and agencies simply refuse to use the materials?

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This chapter is based on "The Ecuador Project," by David R. Evans and James Hoxeng, Technical Note #1 in a series describing various facets of the project. The series is available from the Center for International Education, School of Education, University of Massachusetts, Amherst 01002.

<sup>1</sup>This study uses "the project" or "UMass" to mean the "University of Massachusetts Non-Formal Education in Ecuador Project as implemented from January 1, 1972 under contract number AID/1a-699 with USAID"; and "we" refers to project staff.

Or would they after initial exposure just tell us the materials weren't quite what they'd had in mind, thank you very much? Would the ideas be so unrelated to their cultural backgrounds that they would be incomprehensible in spite of interest and good intentions? These were questions we had to ask initially.

To elicit any kind of satisfactory answers, we had to concentrate during the first year on doing our best to make something happen. If intentional nonformal education remained a nice but non-operational idea, there would be neither possibility nor need to examine it in detail. We tried to use methods and ideas that could be adopted without major resistance or dislocation if they proved worthwhile. Chapter nine will take an extended look at the project's ideas in the light of variables which affect adoption of innovations; meanwhile, the reader might wish to look at the following descriptive chapters as a case study in one approach to getting new ideas adopted.

#### Host Country Leadership, Job Flexibility

Since we had decided to be an action-oriented project, we had to gain the confidence of the Ecuadorian organizations with which we would be cooperating. The project staff concluded that it would be best to have maximum Ecuadorian staff participation. No gringo expertise would

be lost, since no one was an expert in the area. Ecuadorian staff leadership at the outset would mean the project could escape the "Made in America" label and give the project a maximum Ecuadorian flavor from the beginning. Integration into ongoing Ecuadorian programs would be easier. And being able to honestly say that this was an Ecuadorian-American project would make all project staff more comfortable.

It was further decided to keep gringo presence in Ecuador to a minimum, relying largely on short-term people coming in for specific tasks to provide the major input of ideas from UMass.

One of the watchwords of the project staff was non-specialization. Everyone was kept abreast of the activities of the others, and tasks were shared almost indiscriminately. The director participated in training and follow-up, the field man made contacts with the Ministry officials, the office messenger also served as materials production chief, the secretary wrote a case study of one of the subprojects, the Amherst campus coordinator headed the first evaluation laboratories, and all participated in brainstorming new ideas for materials. The aim was to allow everyone to learn as the project progressed, since no one could claim the definitive answer to any of the new problems which cropped up daily.

Different Strokes for Different Folks

We made the assertion early on that the curriculum of formal education is inappropriate for rural Ecuador because in its standardization it favors the needs of urban over rural areas. We also felt that the needs of rural populations are not identical from one area to another. Thus any nonformal education project that tried to set up a standard nonformal curriculum would be running the same risks that have tripped up the formal system. The nonformal educators would be in worse trouble, however, because they would have no way of making people come to them to learn--not that compulsory attendance laws work surpassingly well in any case.

Different Menus for Different Venues: in trying to develop nonformal materials, we used the cafeteria approach, preparing a variety of what seemed to us enticing recipes consistent with the customers' general habit patterns, and allowing the clients--rural Ecuadorians--to select what turned them on, with no penalties for ignoring the rest. How they ingested the information and skills contained in the materials would also be primarily their business, once we had laid out a few tools and suggestions.

We knew preferences would vary from one group to another, and we resolved not to feel threatened if some of the materials were ignored entirely--they could easily be

taken off the menu or tried out on a different clientele. We would in any case prepare more materials than would be usable immediately, keeping some in reserve to be produced as tastes and needs became better defined.

### Functional Learning

The menu had to be nourishing. Our major educational goal was that rural people acquire insights, knowledge and skills directly useful to them in their daily living. We emphasized such things as the numeracy required for market settings, awareness of problems in one's environment and the options available for their solution. Another important aspect of the goal was the development of a sense of self-worth and a belief on the part of the participants that they were capable of learning, and that they could have an influence on their own life situations. Campesinos have been told for so long, directly and indirectly, that they are stupid and incompetent, that it by now amounts to a tacit but firm conviction. Literacy was included in our goals, but only as it related to the villagers' needs, and not as an end in itself.

These then were our best readings of the clients' needs, what we guessed would be both tasty and nourishing. The real test of what learning was functional would of course come from the clients' choices over time, and we



planned to adjust the overall menu accordingly. Literacy or any of the other above mentioned areas of emphasis vary in importance over both space and time: different communities have different besetting problems, and as any community progresses, its besetting problems change also. Functionality is contextual, and must be so seen.

#### Non-Professional Manpower

Our materials had to be cooked up and served by amateur chefs. We started with the assumption that any educational mechanism which required a fully trained and paid professional educator in each village would be impractical. Even if such people were not professionals and had only low levels of formal education, their cost would strain the available resources severely, and they would be subject to all the problems presently affecting teachers. Use of non-professionals would also emphasize the basic philosophical viewpoint that people can learn from each other and that education doesn't necessarily require someone labeled "teacher."

To operationalize this concept, we used two approaches. First, we took steps to "sell" the idea of using our materials to a number of organizations already involved in nonformal education, but whose people were not professional educators. Second, we placed our bets on the

conviction that campesinos without teaching certificates could use the materials effectively. In addition, we provided the materials to professional teachers in the Department of Adult Education as a low-risk way of ascertaining whether they would find them useful in their classes. We were pretty sure they would, and we hoped that using the materials would help reduce the dropout rate and increase learning in the adult education program. The real potential, however, lay with the non-professionals.

#### Materials

The menu had to be attractive enough to lure the customers to the dining room, not too sophisticated for their palates, cheap enough for them to afford, and we'd provide recipes to take home.

Eliminating the formal schooling model does away with compulsory attendance, reduces authoritarian relationships between teacher and pupils, and removes the promise of a primary school diploma as an external motivator. As a result, nonformal materials had to be attractive, self-motivating, and usable with relatively little outside input. The materials had to initially require only the level of numeracy or literacy skills which users were likely to have. Topics had to be related to the lives and experiences of rural villagers and be perceived by them as

useful and entertaining. Our goal was to provide a series of materials which would rapidly lead people to create further materials of their own and to take an active part in structuring their own learning. Finally, materials had to be cheap, easily reproducible, and readily available.

Although an initial set of twenty basic ideas was created at the University of Massachusetts by the project staff, much of the subsequent adaptation and creation of new materials took place in the field. To facilitate this process, the ideas created outside were presented in partially completed form with sample materials purposely produced in an unfinished way. Rules for the games were often not shared in their entirety with groups testing the materials. As a result, substantial modification of pilot ideas took place from the start. After the first few months, new techniques were also developed in the field from ideas generated by participants. Following are comments on the criteria listed above, with examples of how the desired attributes were reified.

One of our primary criteria was that the materials be cheap and easily reproducible from locally available materials. Ideally, many of the devices could be constructed by the villagers themselves once they were exposed to a model. Thus things like wooden dice, simple playing cards, and games like ring toss or simple roulette

could be easily constructed by local carpenters. Devices which are produced outside the village would be durable, attractive and above all cheap--within the budget of typical families. This meant an effective limit on the cost of reproduction of most materials of 50 cents or less.

Another important aspect of the materials was motivating ability. They had to be fun to use in order to spark interest and participation. Our goal was active involvement which would help users gain confidence in using the concepts or skills taught by the materials. With nothing compulsory about their use and with external rewards largely nonexistent, the materials had to carry the full motivational ability within themselves. We tried to make full use of local cultural traditions of entertainment. Gambling, competition, prizes, or whatever seemed to generate enthusiasm and participation were used whenever appropriate. We saw flexibility in the components and processes used in games as a motivator. We guessed that the more that villagers could change the materials to make them fit local circumstances, the more they would participate.

Materials were to have immediate relevance to the users' situation. The ideas needed to appeal to villagers with little or no formal schooling, and to relate to the substance of their daily lives. Reading, writing and

simple math were to be related to a discussion of community problems and issues. Such an integrated approach to self-development was facilitated by making use of aspects of popular culture. Local games were modified to include practice of numerical skills, and so forth. A number of the project's current materials are direct modifications of locally popular games. Further, instead of prescribing the way in which disputes are to be resolved in the rules of a game, we left the process to be devised by those playing the game, according to their own customs.

Use of the materials had to be possible with only minimal input from trained outsiders. We intended that local non-professionals with short intensive training would be able to make use of the most complex materials. The simpler devices were to be self-explanatory and require little more than a group of individuals interested in using them. Most of the devices had to require little in the way of literacy skills. Even the more complex simulation games were able to be transmitted verbally as long as someone in the village knew how to play. For example, the Hacienda game (chapter four), instead of having written rules available to the players, incorporates the role of a lawyer who knows the rules. Players must negotiate with him as they go along to discover what they can or cannot do. Under such circumstances rules are very flexible, and each

village or group tends to develop its own version of the game.

Finally we saw materials as part of a self-generating curriculum, rather than as a finished product. Avoiding written rules, using unfinished versions of games, keeping materials simple and unimpressive to avoid intimidating users, are all techniques which help the materials serve as input to a process rather than as an endpoint. This is consistent with one of our overall purposes of nonformal education, i.e., to release local resources and to develop in people an awareness of their ability to learn from already available materials and people.

#### Complementary Distribution Systems

We sought to promote a wide range of distribution methods and ways of utilizing the materials. We made a conscious decision not to build a centralized bureaucratic model of nonformal education. Instead, the project was to function as a resource center for ideas and for pilot development of materials. Project staff would work with any institution which showed an interest in the materials and would agree to use them in current or future programs. The goal was to make a set of new materials and processes available to a number of government, private, and local organizations.

We made a not-quite random series of decisions as to which institutions involved in nonformal education the project should work with. Our basic criterion was complementarity, that is, to work with institutions that (1) concentrated on different segments of the population; and (2) went about education for different reasons and in different ways. We decided to begin work with groups involved in coop education, general adult education, radio-phonics schools, volunteer education, and community-sponsored literacy classes. While this omitted such seemingly obvious agencies as the church and the army, the door was kept open for subsequent contact and provision of materials to these and other agencies working in some aspect of nonformal education.

The above cooperating groups constituted both institutional and non-institutional frameworks. Cooperatives and the ministry of education are of course organized with their goals clearly in view, and materials had to be developed which they would find useful for achieving those ends. The non-institutional (volunteer and community-based) groups have no particular axe to grind, and for them it was decided to concentrate on general materials for literacy, math, and consciousness-raising.

By producing materials for and working with these disparate groups we hoped to learn more about what kind of

involvement was more effective for the campesinos. We would also be preparing ourselves for linkage with a variety of other organizations, if and when they became interested. Periodically, to stir up interest we invited interested agencies and individuals to "show and tell" sessions where they were treated to a "hands on" demonstration of the games and materials.

The combination of institutional systems, both governmental and private, with non-institutional systems has the potential of forming a comprehensive national network made up of complementary distribution systems. The result could be the closest thing to a national education system--as opposed to a school system--yet developed.

The debate as to how centralized and coordinated such a network should be will continue for some time. We are operating on the philosophy that at least for now the lack of a single coordinating agency is desirable and in fact has a number of advantages. The problems of relying solely on centralized agencies, whether government or private, include at least the following factors: their capacity and penetration is often severely limited by shortages of personnel and resources; the population is not homogeneous and large segments are routinely discriminated against; there is a lack of continuity in programs; approval is needed from above before action can take place; and almost



inevitably, solutions and problem definitions come from the central (or even an external) agency. The result of these characteristics is usually the reinforcement of behaviors of dependency and passive acceptance of things as they are by the recipients of services.

As an alternative, the project seeks to stimulate the creation of community-based decision and demand systems, in which people become aware of themselves as resources, and begin to develop "survival skills" required to interact with agencies: (1) the ability and willingness to approach the appropriate source of information or material; and (2) techniques to get a reasonable hearing from organizational representatives, politicians, and educators. Development assistance programs often tacitly depend on the fact that only a small percentage of the population knows that they exist, and that even fewer know how to gain access to their services. Large scale development and use of such survival skills would readily reveal the inability of the government to cope with such demands and would necessitate creation of additional approaches.

The combination of self-reliance and the ability to make use of government capacities may provide the best hope for educational and economic development.

Free Access to Information

Finally, to help promote the complementarity we sought, and to assure that the materials would be used, we made it clear from the outset that anyone could pick up the ideas and run with them. Beginning with our "show and tell" sessions, we encouraged that adaptations, copies, or whatever, be made by anyone who felt he could use anything we had to offer. We asked only that users let us know what they were doing, if they felt the information would be useful to anyone else. One potential problem was the desire of various persons to obtain a commercial monopoly of our ideas--in effect, to steal them and sell them back. Copyrights were applied for to forestall this possibility. Meanwhile we planned to develop a commercial sector for dissemination of the methods through traveling salesmen, magic shows and so on. Since such a large percentage of the population is outside the range of institutions, we felt that experimentation with existing ways of reaching outlying areas would be worthwhile.

## CHAPTER III

### PUTTING THE IDEAS TO WORK: AN OVERVIEW

The project contract called for development of non-formal materials, testing them with cooperating organizations already involved in nonformal education activities, and making them available to other interested people. In addition we hoped to explore possibilities for a nonformal education network, integrating various discrete programs and ideas in some manner that would evolve during the life of the contract. Of that, more in chapter nine. Following are descriptions of how we proceeded to develop and introduce materials.

#### Material Development

One of the project's first tasks was to produce a number of materials in pilot form. These would be used in the "show and tell" sessions scheduled during the second month of the contract, and would then be modified based on experience in the field. But without the materials nothing could begin.

Before the proposal was submitted to AID, UMass staff had spent considerable time discussing the kinds of materials which might work as a mechanism for involving campesinos and be useful for them in the kind of basic education we were

talking about.

One of the most fruitful early ideas was the use of games as a way to involve people, to give them practice in the skills they needed, and to provide the kind of group interchange thought to be necessary for dialog and decision-making. The idea of games was also in keeping with our goal of avoiding solemnity in favor of irreverence and fun. The only problem was that no one knew whether campesinos would be interested in playing games--and if they were, what kind of games would turn them on.

During contract negotiations in Ecuador, a couple of ideas were developed and pilot tested with campesino groups. One, called Hacienda (described in the following chapter), was a complex board game based on Monopoly. Education consultants were certain it was too complicated, but the first group of campesinos who played the game (mostly followers, not outstanding leaders) continued for eight hours, and proved more adept than the gringos at moving into sociodrama, arguing, negotiating, making deals, and generally enjoying themselves immensely.

A different type of technique was derived from the teaching method of Sylvia Ashton-Warner of New Zealand, as described in her book Teacher.<sup>1</sup> Her method for building

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<sup>1</sup>Sylvia Ashton-Warner, Teacher (New York: Simon & Schuster, Inc., 1963).

self-confidence and basic abilities in reading and writing seemed potentially usable by campesinos as an introduction to literacy. Too, her method included discussion as an integral part of skill-building, and we wanted to move toward some way of making use of the dynamics of Paulo Freire's method,<sup>2</sup> without investing the time and expertise which it demands. An adaptation was made and introduced to campesino leaders selected to participate in an early training course. This dialog method, as it came to be called, proved understandable and acceptable to the campesinos, and ultimately became a major tool in the repertory of nonformal education materials.

With these ideas as a base, the project staff felt confident enough of the approach to invest most of the initial material development time in similar participative techniques and games. To get off to a quick start we decided not to give assistantships to one or two capable graduate students at the University, and then sit back waiting for them to produce, but rather to involve as many "amateurs" as possible. Project staff were confident that the basic ideas were interesting and provocative enough to elicit participation by a number of graduate students, who would then be paid on the basis of what they produced.

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<sup>2</sup>Paulo Freire, Pedagogy of the Oppressed (New York: Herder and Herder, Inc., 1971).

Word was spread, and regular afternoon meetings were set up at which anyone could drop in and spin off bright ideas. A dialog developed, and proved most productive. A core of interested people grew quickly, and a number of techniques were invented or adapted in a few weeks. The project paid \$25 for a germ idea, \$50 for a semi-finished product, and \$75 for a usable technique. A description of the ideas that were put together on the campus and in Ecuador is contained in the remainder of this section.

#### Techniques for Literacy and Numeracy

A. Fluency games: To increase campesinos' confidence and ability with basic transactions involving literacy and numeracy, we borrowed ideas from the myriad games available on the US market, and contributed a few ourselves. Probably a dozen more were developed than are listed below, but there was simply no time to test them. This was intentional, as we in using the cafeteria approach were banking on having a temporary surfeit of materials in order to allow the participants to choose and discard.

Letter Dice	Number Dice
Word Rummy	Roulette
Math Bingo	Math Ring Toss
Math Pinball	Math TicTacToe
El Mercado (unit price card game)	
El Burro (multiplication card game)	
El Chulo (reading and math board game)	

We shall not spend time explaining the rules of these games, since most of them are obvious. Interested readers may refer to the series of Technical Notes put out by the Center for International Education\* describing the ideas in more detail.

B. Expressive techniques: Campesinos' traditional apathy is due at least partly to their having been told for generations that their opinions are not worth expressing. We devised a number of exercises to encourage rural people to speak their minds, to hear their own voices, and to listen to one another.

Ashton-  
Warner  
Dialog

In a loosely-defined series of six steps the participants move from learning to write letters to writing words that have significance for them, and then to discussion of what they have written. A summary of the steps follows:

1. Create a climate of confidence. This basically means stressing "compañerismo" instead of the normal authoritarian teacher-student relationship and emphasizing that no one person has all the answers, so all should feel free to speak.
2. Solicit from each participant his word or phrase for that day - whatever idea, problem, or concept is most important to him at that time. The word is then written in the participant's notebook.
3. Practice writing the word or phrase in the notebook, with help from the facilitators.
4. Writing at the blackboard to share with other participants and to build confidence.

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\* Center for International Education, University of Massachusetts, Amherst, Mass. 01002.

- Ashton-  
Warner  
Dialog
5. Story writing - beginning with only two or three words, but writing what participants want to say, again with facilitators' help. This step has been the most difficult to implement and is often omitted or postponed.
  6. Reflection - sharing words and stories, discussing what bearing they have on the lives of the participants, seeing what problems emerge, and thinking about possible solutions. This step is seen as indispensable by the facilitators.

The idea is that this method should serve as an introduction to other literacy methods--the rationale being that once participants have begun to express themselves they will continue to do so. We feel that this self-expression is critical not only for literacy but also in achieving the change-orientation and awareness necessary for development.

Rubber  
Stamps

Not the kind you're imagining, but rubber stamps with pictures--line drawings of people, houses, animals, whatever--that can be used to create a story.

These have only been pilot-tested, but early results are promising. People are using the stamps to represent ideas nonverbally, or they are adding captions in comic-book style. A series of stamps has been put together which represent all the squares on the Hacienda board, so the game can be reproduced for practically nothing. Other ideas are taking shape as well, as using the stamps in one way suggests several new possibilities.



### Consciousness-Raising Techniques

A. Simulation games: The Hacienda game mentioned previously was the prototype for this group. Once we saw that campesinos were eminently capable of playing this kind of game, and of actually getting more out of it than was put in by the developers, other simulations were begun with different purposes. The development process is long, however, and arriving at a satisfactory simulation is a demanding task. Hacienda will be described in the following chapter. Here we shall mention other simulations and their stage of development.

Cooperative. In response to statements from coop federations that one of their major problems was to help campesinos understand how a coop works, this game was designed to compress the experience and make it more dynamic than a lecture. It simulates many of the conflicts and decisions that take place in a coop. Coop members who have played the game reacted very favorably, although to date we don't have enough experience to say that the simulation is satisfactory as it stands.

Feria - was intended to reflect market forces affecting the profit a campesino realizes from his crops. However it turned out to be too complex, with too many variables, and is now being reworked into a series of shorter and simpler simulations.

Nutrition - is in a preliminary stage. Its purpose is to simulate purchasing and preparation of campesino food, with the intent of stimulating insights into possibilities for improving diet without

going bankrupt. It will be used in structured training sessions now being planned by AID.

Theft (El Robo) - based on Clue, was developed for use by cooperatives in response to statements that "loss" of funds was one of their most common problems.

There are several others now which could be mentioned but they will eventually appear in the Technical Notes.

B. Ashton-Warner: As was discussed in the previous section, the discussion step in the Ashton-Warner method leads to conceptualization of, and talk about what can be done to solve, problems in the community. The facilitator indicate that this process of dialog is of fundamental importance in reaching decisions and taking action based on them.

C. Tape Recorders: In the Radio Mensaje project we decided to provide cassette tape recorders to the radio school participants, and to let them record whatever material they chose on the cassette. These cassettes were then compiled into a regular half-hour program called Campesino Message. The program is proving to be popular, and the fact of hearing themselves on the air seems to be having an effect on the participants' self-images. More will be said on this in chapter seven.

D. Fotonovelas: Comic books with photos, and generally with romantic themes, are a popular medium of

communication throughout Latin America. Most of the fotonovelas sold in Ecuador are produced in Mexico or Argentina, and use urban, aristocratic casts. Young women are the most avid readers of these tearjerking stories, but they are also read by a variety of people who rent them at outdoor stands in hundreds of locations around the country. We decided it would be worth a try to produce a fotonovela with a campesino theme and characters. Basically our intent was to raise campesino consciousness of themselves as capable, interesting people. In addition, if the fotonovela were sold and rented on newsstand to a generally middle-class trade, it could be an information device--because the urban middle class knows very little about campesinos and campesino life.

Twelve thousand copies of the first fotonovela "Manuel Santi: Between Love and Hope," were printed in late 1972, and proved popular with campesinos, who identified with the campesino hero as he tangled with authority and won. They also sold reasonably well on newsstands. A plan was drawn up for six more issues to be produced in 1973, and the second issue was produced in April, 1973. Each copy costs about 20 cents to produce, but the selling price was fixed at 14 cents to match the cost of other fotonovelas on the newsstands.

Initiation of the Project: "Show and Tell"

Because we had decided to work through Ecuadorian organizations, and to make the materials available to anyone interested in using them, the staff elected to hold a series of "show and tell" sessions--hands-on laboratories to which everyone known to us who might be interested in using the materials was invited.

Official and unofficial representatives from fifteen organizations attended the day-long sessions. They played the games, discussed the potential they saw for using the ideas in their programs, and made suggestions as to how they felt the ideas could be improved. The sessions were highly participative and evidently made an impression on the participants. During the year, only two of the groups represented failed to make at least some use of the materials.

Other agencies which did not attend the sessions showed up later, or were introduced to the ideas by third parties. In a dozen or more cases, agencies or individuals with whom the project had no direct contact made some use of the materials. Even the army, introduced to some of the games by an outside consultant, made use of them in their recreation rooms, as word rummy took its place alongside the pool tables. Hearsay has it that considerable money was wagered as recruits sharpened their math and literacy

skills.

At any rate, the show and tell sessions served their purpose. Many more people than the project could work with directly were introduced to the ideas, and the result was more widespread use and testing than would have been possible had the project adopted the traditional Knowledge is Power stance. We even let the Ford Foundation use the materials for nothing.

### Implementation

Prior to and during the course of the show and tell sessions, discussions were held with organizations interested in participating directly in the project. Tentative decisions had been made before the project began, based on the staff's desire to work with a variety of programs, but during the early stages some changes had to be made as agencies changed emphases, or as relations between agencies deteriorated, key people were transferred, and so on. Following is a listing of those groups with which the project worked directly, and some comment as to why they were chosen.

First we shall mention briefly the two groups which are treated in more detail in subsequent chapters, the Facilitators and Radio Mensaje.

### Facilitators/CEMA

CEMA (Centro de Motivación y Asesoría), a group of Ecuadorian professionals originally funded by AID to do motivational training and consulting, was in the process of negotiating a contract with AID to begin a community education project when the UMass survey team arrived in 1971. After considerable dialog, UMass was invited to take charge of developing materials for use by the campesino community educators, and to participate in the initial training session. The project staff continued to work with the facilitators during the year, and began to participate more directly as time went on. When the facilitators began to make plans for training representatives from neighboring communities, the project intervened on their behalf with AID to obtain training funds. CEMA has continued work in the communities as well, and obtained a contract to repeat the original training session with representatives from ten new communities. The facilitator project is treated extensively in chapters five and six.

### Radio Mensaje

Radio Mensaje is one of three radiophonics school programs in Ecuador. It serves about fifty communities with daily classes which lead to a primary school equivalency certificate after three six-month cycles of study.

The director of the program reacted favorably when approached by UMass staff regarding the possibility of using cassette tape recorders in the radio schools. He was amenable to using the recorders, at least until circumstances proved differently, in a completely free fashion, leaving it up to the people themselves what they would record and send in for broadcast. This fit in nicely with his already existing plans to relate the radio schools more closely to the life of the communities. We agreed that the project would provide 40 tape recorders with cassettes and batteries, and that these would be placed in the care of the auxiliar (helper) in each of the radio school centers. This project is described in detail in chapter seven.

In addition to the above agreements, the project worked with Ecuadorian groups in three other areas.

Ministry of Education/  
Federation of Rice Cooperatives

In the province of Los Rios on the humid plains near the coastal city of Guayaquil, the project was invited initially by the Federation of Rice Cooperatives to help run adult education centers in several of their coop communities where there was a high illiteracy rate. As mentioned earlier, this was directly in line with the project's desire to work with cooperatives, and the invitation was quickly accepted. This implied working closely with the Department

of Adult Education of the ministry, so contact was made with the provincial supervisor for Los Rios, who agreed to cooperate.

As the time approached to begin the training, a problem developed with the Federation. Their relations with AID had deteriorated badly, and UMass was naturally identified with AID. The Federation withdrew active support for the centers, but left UMass free to continue its activities, working with the Department of Adult Education.

The Ministry for its part became more interested as time went on, and instead of conducting training for five or ten adult education teachers, the staff trained 39 teachers from all parts of the province.

Providing these teachers with materials was an effort the project staff wanted the ministry to make. This was accomplished by offering the provincial adult education supervisor a chance to make the games, and to collect cost plus 15% from the project for his efforts. This arrangement, although it proved time-consuming, resulted in 50 copies of seven games being made and distributed to the teachers with the full enthusiastic cooperation of the supervisor.

The project topped up the salaries of the teachers working in five of the coop centers so they could participate full-time in the community life (normally, because of



budget structures, adult education teachers are expected to have some other employment, and are paid for only the two hours a day they actually teach in classes). The five teachers, all young and eager, tried their best to enter into community affairs, and achieved a degree of success. The experienced proved grueling, however, as the teachers' city-bred stomachs rebelled at the campo menu. Much of the time they were severely discouraged, and by the end of the year it was the consensus that the extra money and effort had not made a notable difference when compared with similar centers where teachers had worked only part-time.

The games were popular with both teachers and students. In an end-of-year meeting, attended by the 16 of the original 39 who could get through spring floods, the teachers were unanimous in their satisfaction with the ideas, and in their desire to use them in coming years. Also, unofficially, the number of centers which completed the academic year was noticeably increased. An assistant supervisor told project staff that of the 39 centers in which the teachers had used Ashton-Warner and the games, all had survived to take the year-end ministry exam. The previous year only about 1/6 of the centers which began the year had been able to muster up students for the final exam. Unfortunately, these figures cannot be corroborated from the supervisor's official year-end report, because reality

is effectively masked by the necessities of bureaucratic survival. According to the report yes, the games were magnificent, but both years were great successes. Dropout figures however, showed the experimental centers lost more people than the regular centers--which may be largely attributable to greater frankness on the part of the five experimental teachers than in the other centers. So it goes.

In the coming year, plans are to expand the project's involvement with the Department of Adult Education and other units within the ministry. Some of the games will be reproduced for use in adult and formal education, and other provinces will probably be exposed to the ideas.

#### Quechua-Speaking Indians

In its lowest profile involvement, the project trained some local literacy teachers in a Quechua-speaking area in the use of the techniques. Since these people were already involved in adult education, the idea was simply to offer the games for their use. This was possible because the project's field man is himself an Ecuadorian Indian, and Quechua was his first language. The Indians, always very chary about accepting outsiders, invited the staff to share ideas because of the confidence inspired by the project's field man.

Some of the games were adapted for Quechua, but the

staff was surprised to learn that not only were the people generally illiterate in Quechua, they were not interested in studying it. They concentrated on Spanish, since that is clearly the way to go for market dealings and almost any other form of commercial transaction with people outside the village.

At year's end, four centers were functioning in the area, and these were making use of some of the materials-- mostly the dialog/reflection ideas and the fluency games. One teacher was using the Hacienda game as a consciousness-raising device in community meetings, building discussions around the roles and situations experienced in the game.

#### Ecuadorian Volunteer Service (SEV)

SEV is an organization modeled on VISTA. It was established by AID to see whether Ecuadorian university students would respond to the possibility of Peace Corps-type assignments, and whether they could function effectively in work with campesinos.

Twenty-two volunteers were working in education, and it was to this group the project was invited to present its ideas. The students, in spite of working for an AID-supported institution, were highly suspicious of the project's "imperialist nature," and considerable time was spent in dialog before the staff was able to get down to

business at hand and demonstrate the techniques.

Results with the volunteers were uneven. Some volunteers (the "good guys" in our view) made excellent use of the materials, used them in training of other people (such as a group of secondary school students who worked as summer volunteers in the campo), and put together new versions of some of the games to better suit their needs. Others did nothing. Generally, however, results were positive. The major question at this point is whether SEV will continue to exist once its AID budget disappears in about a year. Present betting is that it will not.

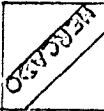



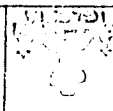
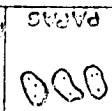
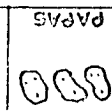
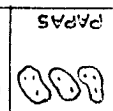

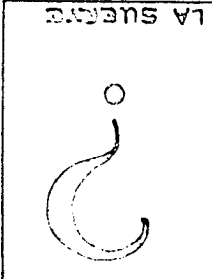
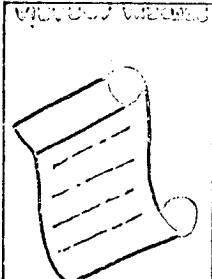
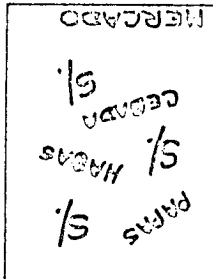




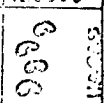
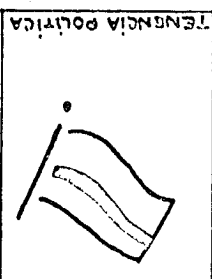
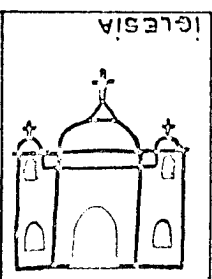
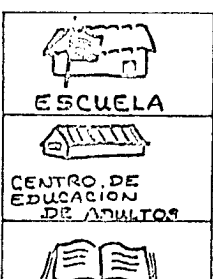













#### Case Study Selections

From the above sketches it should be reasonably clear why the first two projects were chosen for more intensive analysis in subsequent chapters. The facilitator model and the radio school model have greater possibilities for expansion than do the other subprojects. Their potential multiplier effect is greater, and as we shall discuss in the final chapter, they seem to fit into a still-hazy scheme for a nonformal network.

Subsequent chapters will detail what happened in these projects. Before getting to that, however, we shall take a look at one of the simulations, Hacienda, to help give readers a better idea of: (1) the campesinos' living

situation; and (2) what kind of materials the facilitators were using when they organized their centers.

CHAPTER IV  
THE HACIENDA GAME

								
VENTA EN EL CAMPO VENTA EN EL MERCADO VENTA EN EL MOLINO	 <p>LA SUERTE</p>	 <p>REFORMA AGRARIA</p>	 <p>MERCADO</p>					
ASERENAMIENTO ASERENAMIENTO	 <p>TENENCIA POLITICA</p>	 <p>IGLESIA</p>	 <p>ESCUELA</p> <p>CENTRO DE EDUCACION DE ADULTOS</p> <p>AUTO-ENSEÑANZA</p>					
TIERRAS DE LA HACIENDA TIERRAS DE LA HACIENDA								

## CHAPTER IV

### HACIENDA

#### Origin and Purpose

Apathy is the apparent stance taken by most Andean campesinos\* toward modernization and its institutions. Middle and upper class Latin Americans generally believe that campesinos have no wish to change their life style, or are simply too lazy to do so.

One of the tenets of our nonformal education project is that this apathy is basically a defense mechanism, the only viable way the campesinos have found to preserve their personality and dignity vis-à-vis a culture which offers them little opportunity.

The game attempts to reflect the campesinos' reality in a mildly irreverent way, offering them a chance to portray the officials they know so well, who administer the inequities which face them every day. The game underlines the campesinos' precarious position with respect to duly constituted authority, and in relation to the hacendado

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\* Because so many Spanish terms are used in this chapter, the usual procedure of underlining foreign words proved annoyingly disruptive for the reader. We have decided to omit identification of Spanish words by that method. Terms which have not been translated previously are followed by their English equivalent.

whose wealth and position generally guarantee him a very different treatment under the law.

Several value judgments are incorporated into the game: that school provides very little possibility of reward to rural dwellers, but that other more utilitarian educational alternatives exist; that acquisition and improvement of property is a necessary factor in bringing about any change in the present situation; that working together is virtually essential; that information is a valuable source of power. These values have been seen to be consistent with those held by the campesinos who have played the game.

#### Setting

Before launching into a description of the game as such, it is useful to visualize the surroundings in which it might be played in the campo. The house is likely to be constructed of adobe, with a thatched roof, without electricity or water. In the sierra, the nights are chilling with the cold of an eight to ten thousand-foot elevation; near the coast, one always perspires, as the equator is only a few miles away. In both areas, smoke always fills the upper third of the house, for there are no chimneys--the smoke provides a convenient way to kill the many bichos, or bugs, which would otherwise plague the occupants.

The occupants themselves, if they are Indians, wear



traditional dress, especially the women: long embroidered skirts and cotton blouses; a poncho useful for warmth, for carrying children, and for decoration. On the coast that dress is more nondescript--the hot weather dictates dressing for maximum comfort and ventilation. The people have strong faces, weatherbeaten, not unkind. When they are drinking paico or chicha the space behind their eyes becomes empty, the fierce liquor suspends all mental activity, and they fight or simply stagger senselessly--otherwise, they are quiet. The children don't cry much; they are busy taking care of chores or of their younger brothers and sisters.

Now picture a gathering of from five to forty campesinos who have between two and ten hours to spend. Then imagine introducing into this setting a monopoly-style board game.

#### The Basic Method

Hacienda is a board game which attempts to simulate certain aspects of the peasants' situation in rural Ecuador.\*

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\* Special mention needs to be made of individuals who contributed to the development of the game: Bill Smith, who changed the game from a nice idea into something on paper; Edgar Jácome, whose suggestions for the teniente politico and other situations were born of his long experience in the campo; and to Gilberto Espin, who outlined the church situation cards as only an ex-priest could. The campesino players themselves must take credit for the idea that the lawyer be the only person in the game who knows what the rules are and who eagerly sells but reluctantly delivers his services.

Some groups using the game have renamed it, "Juego de la Vida" or "The Game of Life." The pivotal role in the game is the lawyer, and only he has a copy of the rules. The other players must consult with him frequently. Since he does not otherwise take an active part in the game, his income must be derived from the advice he has to give.

The hacendado (owner of the hacienda) is chosen by a roll of the dice at the outset (like an accident of birth); he then gains title to all the properties of the hacienda, and is given 20 times as much money as the campesino players.

It is also possible to name a *teniente politico*, or political boss, if there are extra players available. He usually does no more than collect fines, but in cases of disputes between players he earns money for exercising his influence.

The banker handles all the money dealings. The bank owns all the properties at the outset, and gives the players loans which are generally repaid in installments. The five or six other players take the role of campesinos, and the game begins.

Peasant players roll the dice and move their tokens around the game board. The squares they land on represent institutions and events in rural life. The consequences of landing on a given square are determined by either drawing an appropriate card or following the rules cited by the

lawyer.

Properties in the game have been geared to the Andean sierra. There are four crops: maiz (corn), cebada (barley), papas (potatoes), and habas (beans). These have differing prices, and bring different incomes to their owners. They are all potentially fertilizable and irrigatable, but both of these activities must be done cooperatively; e.g., all properties of papas must be irrigated or fertilized at once, to realize economies of scale. This means their owners must agree to invest at the same time, and nothing can be done until all the papas properties are owned.

The hacendado can buy properties also, but because of the agrarian reform law, he is required to sell these whenever a campesino wants to buy and has money enough to pay. This does not hold true for the original hacienda property, which he is not required to sell until faced with four agrarian reform shares, and campesinos ready and able to buy for cash.

The remaining board squares are filled with other institutions of the campo: the church, jail, tienda or store, chicheria or bar, office of the teniente politico, school, center for adult education, savings and credit coops, a bank, agrarian reform office, market, and one square reserved for self-education. Another intangible institution which is represented on the board is suerte,

or chance. The lives of campesinos are governed to a great extent by events outside their control, and they find in the suerte cards many of these happenstances which bring unanticipated results.

There are too many of these situation cards to list completely, but some examples follow:

1. The teniente politico fines players for not sending their children to school, for stirring up the people, for being drunk and fighting, for stealing a sheep, and so on.
2. The church sells masses: a mass with musicians costs 200 sucres; a mass for the dead with deacons costs 500, and so on.
3. Chance or suerte: a player may lose his year's crop because of a freeze, or the priest may help him out with a gift of 50 sucres, or he may have to go to jail for a year because of a false accusation, and so on.
4. Market: players may collect one of three prices for their products at the end of a round or year: low, medium, or high, depending on both luck and their own decision-making. On arrival at the end of a round, a player has three choices:
  - a) To sell in the campo to an intermediary or middleman, in which case he needn't pay any transport to the market or any costs of processing. In this case he always gets the low price.
  - b) A second possibility is to sell his products unprocessed in the market. He pays transport costs and takes a market card to see what price he has received.
  - c) For an additional investment, a player may pay for processing of his product at the mill, in which case he receives a higher price for his goods at the market.
5. Prices: the market cards are based on considerations of quantity and quality--"too much grain, low prices,"

or "grain of unusual quality, high price." However, other considerations also enter in from time to time: "You were tricked. Go to jail without collecting anything," or "You were given short measure. Low price."

The object of the game is for the campesinos to improve their lot by making use of the opportunities offered to them by society. An ancillary but generally deeply felt goal is to remove the hacendado from his property through agrarian reform, although this is as difficult in the game as it has proved to be in real life agrarian reform programs throughout Latin America.

#### Styles of Play

Styles of play have varied greatly, depending on the preference of the players. Even among Ecuadorian campesinos there has been wide divergence of emphasis. These styles can be roughly classified into overlapping groups: traditional or reality-reflecting; modernization oriented; and role play oriented.

In "reflection of reality," the first style, the campesinos have generally not been eager to invest in property and put themselves in debt to the bank. Instead they choose to rent agricultural properties and give their gross income to the banker. They are then blocked from investing in fertilizers or irrigation to improve their properties, and their income stays at its initial low level. Usually their resource base dwindles as the hacendado, or

perhaps a more industrious and risk-preferring neighbor, acquires more properties and improves them. Slowly their initial cash balance is paid out in fines levied by the teniente politico, in payment for masses, in purchase of staples from their neighbors and the owner of the tienda, and in occasional bouts in the chicheria. The hacendado is generally not seriously threatened, because the agrarian reform program remains essentially moribund. The lawyer and the teniente politico maintain a steady income from fines and fees, and the church resources grow and are kept on the board in full view of the players.

In a modernization oriented game, the campesinos realize at an early date that their only hope for meeting the hacendado's challenge is to work together. Thus, for example, if there are three owners of the potato properties, they go to considerable effort to collaborate in raising money for improvements. They demonstrate a willingness to go into debt, because their initial cash balance isn't enough to allow them to acquire and improve properties while maintaining a cash flow. They realize that only through improvement of their properties can their market income from sales of their products at the end of each circuit around the board--that is, at the end of each year--increase sufficiently to provide money to continue their investment and to hold their own against the

hacendado's acquisition and improvement of other properties.

Modernization oriented players also invest in education, especially in adult and self-education, which have immediate if small payoffs. These payoffs result from improvement of the properties, such as learning about income-increasing innovations by reading coop publications. In the mechanics of the game, this knowledge is reflected in higher incomes from properties for players who have invested in adult and self-education.

Schooling has a different type of payoff. In the game, anyone completing six years of school has the right to sell off his properties and leave the game--ostensibly for the city, where his new primary certificate provides an admission ticket to many urban jobs. However, schooling has no payoff in terms of the players' direct objectives in the game. As a result, players of the game generally ignore schooling after they have given their educational alternatives some consideration.

This style game, as would be expected, gives the campesinos the best chance of making life uncomfortable for the hacendado. He must be insightful enough to take advantage of his initial favorable position, and to acquire and improve properties as quickly as possible. Unless he does so, the hacendado finds himself in a continuously eroding position as the campesinos take more and more

advantages of the opportunities the game makes available to them.

Emphasis on role play can be consistent with either of the above styles, but is more likely to accompany a modernization oriented game. This style requires that the players be quite familiar with the roles included in the game. A player often takes satisfaction from the opportunity to represent one of the characters in a way he knows to be authentic. The game itself can be successfully halted for half an hour at a time while the players negotiate and make deals (above board or otherwise). The hacendado generally has the lawyer overtly on his side, but the lawyer is at the same time motivated by personal gain. As a result, the campesinos have a possibility of actually getting support from him, if the price is right.

On the other hand, it is a traditional role of the lawyer to take fees from campesinos and then counsel them to wait and do nothing while he "researches" the situation. All of these things can and do take place in the game, and negotiations can go on for lengthy periods, with all sides mustering new arguments, evidence, or resources to back up their position. The campesinos find insights as the situations are played out. Comments of "That's life," and its equivalent are heard during the game from players and observers alike.



Other Applications

One indicator of acceptance of a technique is the appearance of adaptations, as those who use it "bend" it to better suit their own purposes. This has happened with Hacienda.

One informal adaptation that campesinos themselves have made is to enlarge the cast of characters (up to forty people have played!) when there are plenty of interested people available. They have added family members for the hacendado and officials of the game who of course influence decisions and directions taken by these persons, as is the case in the campo. It also leads to longer discussions of each problem, as each individual adds his suggestions.

With repeated playings, each village tends to develop its own private version of Hacienda. Special rules evolve and become part of the "way the game is played" in that village. In some cases chance cards are modified by the facilitator to reflect real incidents which have occurred recently in the village. Roles are added or deleted according to the situation in that setting. For example, some villages have little or no interaction with the political officer and his role is therefore not used. On occasion, the actual holder of the role in the village comes to play his own part in the game. In one case this led to comments, amongst much joking and laughter, that the priest

was charging too much for the various services performed by the Church. Players from that village later reported some lowering of the charges on the part of that priest.

Other adaptations have been made more formally. A Provincial Supervisor of adult education in Ecuador has adapted the game to reflect the institutions and practices of the coastal region, which differs in many respects from the sierra. Another adaptation has been made to use the game for family planning. An Ecuadorian has added a family planning center to the game, the major point being that if a player does not enter the center in his first round, he begins the next round (year) with an additional child, and all the additional expenses that implies. The point quickly becomes clear.

As part of the University of Massachusetts' project, the game has also been translated into Quechua, with slight adaptations to reflect the institutions of Ecuador's Indian population.

#### Reproduction Costs

The game consists of the board, a sufficient amount of play money, and the various cards used to indicate fines, actions, and chance. Reproduction thus involves a board large enough for all to follow the game, and a series of cards. Various means of reproduction have been tried or

are being thought about. During the development phase games were made by hand, copied by the office messenger as part of his work. He became quite proficient at it and was able to make a complete game in about 3 hours. Colors were added to the main board by using colored markers or crayons. On this small scale the estimated cost of each game was approximately \$3.00.

As the project faces the need for larger numbers of copies, two approaches have been investigated. The first involves the use of a set of rubber stamps. Each square on the board is made up as a rubber stamp and boards are made by hand stamping each square. Colors are added by having different colored ink pads. The time required to make a board is substantially reduced. The technique raises some intriguing possibilities, particularly as it allows easy substitution for various modifications of the board. Clearly though, the method is not appropriate for large scale reproduction.

Also under study is the commercial printing of the board in three or four colors. Preliminary costing indicates that facilities in Ecuador would not be able to print copies at an economical cost. Printing could probably be done economically elsewhere, although that raises some sensitive issues. Reasonable cost could be obtained by using only black and white and printing on cheap paper,

but that raises questions of durability. At this point a variety of other methods need to be studied further. Our goal is to find a cheap method which is feasible in cost and can be funded by an Ecuadorian agency which is interested in using the game.

### Conclusion

Hacienda, or the Game of Life, has been tried out on an extended basis only with campesinos in the Ecuadorian sierra. Twenty-four representatives of seven sierra communities, chosen by their peers, were introduced to the game as part of a five-week community education training program in late 1971. They played for eight hours, and asked if they could have copies of the game to take back to their people. Games were provided and have been used in the communities since the beginning of December, 1971. In April, 1972, the campesinos were asked to report on their use of the game in the context of the nightly literacy classes they had been conducting. One community said they had used the game only once; two said they had played it every week, or twenty times. Use rates in the other communities fell between these figures. The average was eleven playings of between two and three hours duration (corresponding to the length of the classes), with from six to forty participants.

The camposinos were also asked if they liked the game, to which the response was a unanimous "Si." The twenty-four facilitators were asked, "What are the feelings of the people in your community about playing this game?" A free translation of their observations follows:

"With this game they react to their own lives, and when they play, they say that this is what happens to us in life."

"It helps them to think about things like land fragmentation, chicherias, and lawyers."

"They like it because from it they take clear ideas. We want to keep playing because using this game makes the participants reflect."

"In this game there's something to think about. It's necessary to keep playing to modify our lives."

"The players, even the lawyer, are entertained and find things to think about. It promotes cooperation because the players loan money to each other."

"It's important for fathers and mothers because through thinking about these things they will change their lives."

The game seems to work as a combination of elements. It is at once village entertainment, a forum where issues of concern are discussed, a weekly drama with neighbors playing the leading roles, a chance to experience the connecting links between various actions and the outcomes which follow from them, a time when village conflicts can be discussed without confronting individuals directly, a setting in which new and unfamiliar actions can be tried

without risk--such as borrowing money from the bank--and finally it is participating in the development of a group with a shared set of experiences and learnings. In any village at a particular time only a few of these things may be happening, but over time many of them will occur as the game is repeated and as experience with it grows. Exactly what part of the game is responsible for what kinds of learning remains unknown. As of now, all that can be said is that people play, they enjoy themselves, they return to play again, and a wide variety of community activities is occurring in villages where these groups are meeting.

## CHAPTER V

### THE ORIGINAL FACILITATORS PROJECT

Just after dusk, campesinos begin to leave their mud-walled houses and walk toward the school. They have no light; their feet know every bump of the half hour walk. By 7:30 about twenty-five people are collected around the dark concrete-floored building. One of the campesinos arrives with a petromax lantern and a key. They all enter, and after suitable pumping and preparation the room is reasonably well lighted. There is still a constant problem of shadows, as the lamp cannot be hung high enough for the light to shine down from above. Three of the campesinos take charge; until this time they were undistinguishable from the rest of the group. Two circles are formed; the participants use the school's desks or sit on the floor. One group will choose a game from the three or four which the facilitators have brought. The other will use the Ashton-Warner adaptation ("el metodo de Sylvia"), writing in notebooks and on the board. People choose their group. The game proceeds with much more interpersonal assistance than competition-conscious Americans would be comfortable with. Each player is surrounded by at least two fellow participants acting as coaches. Play is intense, but is punctuated by outbursts of laughter. The Ashton-Warner group concentrates on writing in notebooks, aided by two of the facilitators who circulate quietly among the intent students.

After two hours, the groups come together to talk over some of the ideas which have emerged from the Ashton-Warner group. This night the discussion centers around the possibility of obtaining running water for the community.

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This chapter is based on three sources: (1) "A New Approach to Community Education," a case study written for the UMass project by Valerie Ickis, June, 1972; (2) "Informe Final de la Evaluación del Proyecto de Educación no Formal," an evaluation of the project done by CEMA staff for AID, written by Piedad Figueroa, December, 1972; (3) Observations of the writer during involvement with the project dating from the original training session in 1971 through March, 1973.

The facilitators guide the conversation without dominating it. They ask question after question. Participants aged twelve through fifty contribute their ideas, receiving positive reinforcement from the facilitators. No conclusion is reached; there will be time for that in coming sessions. As the session ends, one of the participants makes an announcement in his capacity as chairman of the town council and leads a short discussion. About ten o'clock the lantern is extinguished. Small groups move off in a dozen directions, wrapping their ponchos more tightly against a cold misty rain. They leave quickly; the work day begins about 5:00 a.m.

### Historical Overview

In the autumn of 1971 a community education contract was signed between AID and CEMA to train 24 campesinos from six rural communities as "facilitators" or community teachers. UMass provided literacy/consciousness-raising materials for the five week training session, immediately following which the facilitators returned to their communities to begin to use the materials and to organize community development projects. Beginning in December, 1971, classes with a total enrollment of about 150 were held five nights a week on a more-or-less regular basis for the duration of the eleven-month contract, and have been continued in three communities to the time of this writing (March, 1973). During that period the communities (there turned out to be seven instead of six) began work on 26 community development projects. Of those, as of March, 1973, thirteen had been brought to successful conclusion, two had failed, and eleven were still being pursued.



Beginning in November, 1972, facilitators began training representatives from neighboring communities interested in emulating the original facilitator villages. By March, 1973, facilitators had planned, organized, and run three ten-day training sessions for some 45 representatives of a dozen new communities, and more courses were being planned. CEMA was also planning to repeat the original project design in ten new communities.

#### Initial Design: Goals and Strategies

The project which trained the 24 facilitators was conceived as an innovative response to problems plaguing schooling in rural Ecuador--the critical lack of resources, irrelevance of the curriculum, and a severe communication gap between city-bred teachers and campesino students.

A group of AID officials and Ecuadorian professionals began in 1971 to formulate a plan which would offer some possibility of solution to the above problems. They established the following goals:

1. Extend educational opportunity to those presently outside the system.
2. Develop new, more relevant materials and techniques to accelerate the learning process.
3. Design a process leading to continuing self-education.

To achieve these goals they had to consider alternatives to the schooling model. The group decided to experiment with community members as "learning facilitators."

These people, who would themselves have to know how to read and write, would be trained in a short period of time to conduct classes in literacy and consciousness-raising.

Much of this thinking was based on the issues raised and results claimed by users of the Paulo Freire method. Although the planning group had had no direct experience with the Freire method,<sup>1</sup> it was hoped that the project would be able to make use of it. In addition the planners felt that these facilitators should be trained in other skills--group dynamics, achievement motivation, information collection, and problem solving, among others.

To do this selection and training, CEMA was invited by AID to submit a contract proposal. That decision was supported by UMass representatives in Quito at that time to draw up a proposal for a university contract; UMass envisioned working with and through Ecuadorian institutions, and the project design was congruent with UMass thinking. It was agreed that UMass would participate, providing CEMA with materials and ideas on literacy and consciousness-raising.

After several months of negotiation, CEMA was given the go-ahead in mid-1971. Valerie Ickis summarized the

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<sup>1</sup>But Juan Bosco Pinto, formerly Freire's secretary, talked with the project organizers while on a visit to Ecuador from Colombia in 1971. For information see Paulo Freire, Pedagogy of the Oppressed (New York: Herder and Herder, Inc., 1971), esp. pp. 100-118.

working hypothesis of the project as follows:

That the creation and implementation of consciousness building literacy centers by villagers would result in an increase in functional literates, certain attitudinal changes and greater community participation in village development.<sup>2</sup>

The CEMA proposal outlined five behavioral areas in which changes would be effected.

<u>Target Behavior/Attitude</u>	<u>Change Objective</u>
Dependence of campesino in relation to other social strata	1. Increase campesino's self-confidence. 2. Obtain more active participation by women in community development. 3. Develop the desire and ability to take advantage of existing resources, without waiting for everything to come from higher strata, chance or destiny.
Conformity, apathy, and resistance to change	1. Increase campesino's aspirations. 2. Encourage development of community and personal planning oriented to taking action toward solving all kinds of problems.
Lack of collaboration and communication	1. Increase community collaboration between community members and with facilitators. 2. Promote: <ul style="list-style-type: none"> <li>a) community participation</li> <li>b) greater participation in family and community decision making</li> <li>c) use of dialog by the campesino as a basic element in all the informal processes.</li> </ul>

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<sup>2</sup>Valerie Ickis, "A New Approach to Community Education," CIE, 1972, p. 6. (Mimeographed.)

<u>Target Behavior/Attitude</u>	<u>Change Objective</u>
Poor use of information	<ol style="list-style-type: none"> <li>1. Increase the number of functional literates, people that not only can read and write but can use information and at times question it.</li> <li>2. Promote:           <ol style="list-style-type: none"> <li>a) reading of newspapers and magazines and listening to radio</li> <li>b) possession of newspapers and magazines in homes</li> <li>c) concern for obtaining more information about topics that interest them and knowing where to get the information</li> <li>d) better sanitary habits</li> <li>e) greater concern for a better diet</li> </ol> </li> </ol>
Paternalistic leadership	<ol style="list-style-type: none"> <li>1. Work toward:           <ol style="list-style-type: none"> <li>a) less paternalism</li> <li>b) reinforcement of internal leadership</li> <li>c) greater shared leadership</li> </ol> </li> </ol>

To accomplish these not inconsiderable objectives, the proposal outlined several strategies.

A. Concentrate on mestizo villages in the sierra:

The CEMA planners, urban dwellers all, were quick to admit their ignorance with respect to the campo and campesinos. They decided that, to minimize this difficulty, they would have to concentrate on mestizo as opposed to Indian villages. Mestizos are of mixed Indian and Spanish blood, and speak Spanish. Indians speak Quechua as their first language, and are noted for their insularity and suspicion of outsiders.

Further, all members of the CEMA team were from the sierra. Ecuador is divided into three areas: sierra, coast, and the oriente or Amazon jungle basin in the east (which contains only about 2% of the population). Traditionally and actually, the Serrano and Costeno view one another with some distaste. The cultures are quite different. The CEMA team felt that as Serranos they had better minimize extraneous difficulties by staying on relatively familiar ground. They decided to concentrate on two provinces south of Quito to which access was relatively easy.

B. Establishing contact with the communities: Even in mestizo communities it is difficult for an outsider to achieve sufficient acceptance to make it possible to introduce a new plan or idea with any probability of acceptance. To overcome this resistance, team members decided they would have to live for a week in candidate communities, getting to know the people and becoming known to them, before the final selection of facilitator communities would be made.

C. Emphasize complementarity with the formal education system: In order to avoid threatening the Ministry of Education it was felt prudent to stress that this project was not conceived with the aim of supplanting the ministry's programs, but rather with a view toward supplementing them

in areas of their greatest difficulty. Bridge-building was undertaken early, and proved successful in virtually eliminating incipient resistance from the ministry and local teachers.

#### Community Selection

Initial screening of communities was done with the cooperation of several development agents, government employees, and church officials who knew the territory. The communities thus pre-selected were chosen according to the following criteria:

1. Mestizo rather than Indian.
2. Accessible by road.
3. Little previous development agency intervention.
4. Similarity to other selected communities, in terms of:
  - a) income
  - b) agriculture as primary occupation
  - c) population from 500 to 3000 people
  - d) resource base sufficient for potential economic viability
5. Openness toward the project and to possibility of change.
6. Illiteracy rate sufficiently high to be viewed by the community as a problem.

Naturally it was not possible to adhere strictly to these guidelines, but the communities selected matched the criteria to CEMA's satisfaction. After team members had spent time in a number of villages, preliminary decisions were made based on community interest, as uninterested communities took themselves out of consideration. The team

then eliminated others in order to arrive at a group of six, three from each of two provinces. Later in the chapter we shall provide short descriptions of the communities in the context of discussing project results.

Once selection was completed, team members went back to the six villages and spent more time explaining what it was the project hoped to achieve, and what would be expected from community members. Effort was made to achieve good relations with local authorities as well. In each of the communities, contact was made with the town council, and their vocal support obtained. Team members did not, however, make contact with two influential community members: in no case were the priest or teniente politico (an appointed official charged with administration of justice at the local level) specifically brought into the discussions and decision. This was to cause some repercussions later.

#### Facilitator Selection

Two of the project's basic beliefs were that (1) facilitators should be selected by vote of the community (the more normal course would have been to allow the town council or other authorities to choose their relatives) and (2) that there should be three or four facilitators from each community to minimize risk of having the program

destroyed in a community by the actions of one person, as well as to build on their different strengths. The team spent considerable time and effort to define and present to the communities objective criteria for facilitator selection. They also described and stressed the need for a democratic selection process.

The following criteria were decided upon by the team:

The facilitators should

1. Have completed third grade (later amended to the behavioral criterion of being able to read and write).
2. Be living with their family (parents or spouse).
3. Be active in community affairs.
4. Be able to work at least two months full-time on the project.
5. Be dynamic and open.
6. Have lived in the community for at least a year.
7. Have demonstrated interest in community development.
8. Have personal growth aspirations.

No recommendation was made as to whether facilitators should be male or female.

A democratic selection process proved difficult to achieve. Although open elections were held in two of the communities, in the other four some "variations" were introduced.

In two communities, only a limited number of community members were invited or allowed by the town council to vote on council-designated candidates. In another, the town council president made up the list himself, including a mentally deficient cousin who was dropped after the first day of training when he proved unable to remember his name.



In yet another, candidates were elected by the entire community, but the election was wired by pairing the candidates instead of voting at large. Candidates favored by the council were paired against obviously weak options.

Despite these modified selection procedures the 24 facilitators selected (with the exception noted above) matched the criteria set out by the team. Nineteen were men of varying ages, the other five were young women. Some communities selected four or five facilitators while others named only two. The average age of the facilitators was 28, although the oldest was 60. Their education was above the campo norm, as they had spent an average of more than four years in school. One facilitator, however, had been in school only one year, and was largely self-taught.

One other factor should be mentioned before moving on to the next section on training. The facilitators were to be compensated for their time during the month of training at the rate of 80 cents per day, about twice the going rate for daily work on haciendas around the communities. This was to help pay for time lost in their fields and at their shoemaking lasts, as most of them would have to pay relatives or friends to take over their part of the work. The CEMA team had not really made up their minds as to whether the facilitators would be paid after the training when they returned to their homes. They did not want the facilitators

to think of themselves as CEMA's employees, but they did want to be assured that the facilitators would concentrate on the educational task and not simply return to the fields once training was over.

This ambivalence was not allowed to remain unresolved, as the first issue raised when the group assembled in the town of Baños was that of compensation. The facilitators felt strongly that 80 cents a day during training was not enough (although that figure had been agreed upon earlier), and that some arrangement had to be worked out for compensation after training.

The discussion was long, but the outcome was predetermined by the campesinos' united front and the indecision of the trainers. The training compensation was raised to \$1 per day, and the facilitators were to receive 40 cents per day when they returned to their communities.

The decision to pay what were in effect salaries was to have repercussions later as the time arrived to decide whether the project should be continued, and if so, how. It also had strong implications for the project's generalizability, if the initial effort proved to be a success. This issue will be discussed at greater length in the following chapter.

## Training

### Preliminary Design

The CEMA proposal outlined the following content to be included in the training session:

1. Provide information about
  - a) health, hygiene, nutrition
  - b) how to obtain information for use in decision and action
  - c) effective utilization of information
  - d) how to separate useful from non-useful information
  - e) how to use to their advantage the existing political and legal system
  
2. Provide training in the following skill areas:
  - a) functional literacy
  - b) working in groups
  - c) communication
  - d) problem solving
  - e) critical thinking
  
3. Inculcate need-achievement thinking with emphasis on
  - a) establishment of goals
  - b) planning
  - c) strategy for prediction of obstacles and progress

Before training could be initiated an unanticipated difficulty arose on the first day: eight facilitators did not show up, including all those from one community, Las Playas. In other cases, different people from those originally chosen came to the training, having volunteered to replace others who for a variety of reasons had not come.

The team decided to try to replace Las Playas immediately. (The reason for their absence was that the local priest had told the people that the CEMA team were really

Jehovah's Witnesses in disguise, and that instead of a training session in Baños they had plans to fly them to Cuba! The team decided it would be useless to argue.) Two trainers went scouting, visiting communities known to them. They scored in two, although there was no time for the kind of education and selection process followed in the other communities. In one, Sigualó, two representatives were chosen by the priest. In the other, Ulpan, a young man and three young women volunteered. There were then seven communities (Tutupala, Guasaso, Puñachizac, El Rosario, and Balsayan from the original group, along with Ulpan and Sigualó, the replacements) instead of the original six, and with the appearance of two previously absent facilitators, there were 24 participants in the training.

Week One: Discussion of objectives, sensitivity exercises, Hacienda game.--At the outset time and effort had to be spent putting the participants at ease and clarifying the course objectives. To achieve this, the CEMA trainers dipped into their bag of sensitivity training exercises. The campesinos participated with gusto and relaxed. Then, following some extended discussions and re-explanations of the course, the facilitators were introduced to the Hacienda game. It had been scheduled for two hours, but the group voted to continue into the next day, and discussions following the game went on for another day.

The game served to focus attention on various common problems and provided a useful vocabulary and reference point--so much so that one CEMA trainer who arrived late was unable to understand what the participants were talking about until he was shown the game.

Week Two: Goal setting, planning.--Here again sensitivity exercises were used to illustrate motivations and power relationships. A new wrinkle was the introduction of a daily résumé of the previous day's activities. Called a "movie," this was a poster-sized cardboard with pictures and text prepared each evening by the facilitators from a different community. These became progressively more inventive, and had the serendipitous effect of impressing the trainers with campesinos' abilities and imagination.

Week Three: Ashton-Warner/dialogue.--To remind participants of how it feels to be illiterate the week was begun with a simulation, teaching the facilitators to read and write in Spanish but using the Hebrew alphabet. This worked well, apart from some initial confusion on the part of the facilitators that they were to use this alphabet when they returned to their communities. This was quickly clarified, and the CEMA trainers undertook to demonstrate the Ashton-Warner method with the cooperation of first-graders from a local school. This was a fiasco. The trainers were unaccustomed to working with children, the

kids didn't understand what was going on and were nervous at being on display in front of a group of thirty adults. The children fought among themselves, urinated on the chairs, and generally caused the trainers' blood pressures to rise before the "demonstration" was mercifully terminated. Discussion followed, centered around the fact that using the method wasn't as easy as it might seem at first glance. During the rest of the week the facilitators practiced the method, using the Hebrew alphabet and each other as students.

It was clear to the trainers however, that they had been too blasé about the implementation of Ashton-Warner. In a late-night session it was decided to take a week off, send the facilitators back to their communities to talk over what had happened to date, and use the time to set up facilities in Quito to provide more practice.

Weeks Four and Five: Ashton-Warner, contact with authorities, work plans.--Evenings during this period were spent practicing the Ashton-Warner method in two adult literacy centers whose teachers had agreed to let the campesinos try out their new skills. This proved rewarding for all concerned, as the adults in the classes seemed to take to the method immediately, and the facilitators learned rapidly how to work together and keep the group moving.

The rest of the time was spent drawing up work plans

for each community and contacting appropriate officials to gain confidence and knowledge in community development matters. The facilitators learned first-hand that although the process was not easy, it was possible to gain access to the appropriate person and find out what one needs to know. By the time the training was ended, each community had a six-week plan drawn up. Agreement was reached to hold the first follow-up session at the end of January, about two months after the facilitators returned to their communities.

### Implementation

Community Sketches  
Covering activities during the period  
from December, 1971 to March, 1973

#### El Rosario

Population: 500

Facilitators: 2, both still working

Classes: At outset, over 40 regular participants; classes suspended after about three months when young facilitator began molesting young girl participants; subsequently restarted, with regular attendance of about 25. Facilitators assisted by teachers from nearby community one or two nights a week; arithmetic assistance from facilitator's 12 year old son. Wide-ranging discussions, good participation.

Community  
Development

Obtain school for community -lengthy negotiations with authorities finally resulted in authorization being granted. Community will provide physical facilities. Obtain use of common lands - another negotiation process, this time to obtain permission to farm state-held lands near the community. Local hacendados against it. Still going on.

Outreach - presented facilitator model in other communities (with Puñachisac facilitators), recruiting for second CEMA-designed course. Recruitment of ten communities was complete by October, 1972, but course was postponed three times by CEMA as of March, 1973.

Outreach - recruited and trained young women as facilitators. Course conceived and planned with Puñachisac facilitators. Twenty girls recruited from five communities; course held March 19-30, 1973.

Note of  
Interest

Facilitators needed cooperation of teniente politico for above community development projects. Before beginning discussions, played Hacienda game, with the teniente politico taking his own role; result was



much more open relationship than had been possible before, and teniente politico supported facilitator efforts.

Puñachisac

Population: 800

Facilitators: 4, three still working in March, 1973  
(one terminated by no-confidence vote taken in class)

Classes: Attendance since the beginning has ranged between 35 and 50 regular participants; evening sessions have continued without a break. Classes are highly participative; for about ten months, Hacienda game was used as Friday night activity, with up to fifty participants. Facilitators claim about two dozen people moved from total illiteracy to basic command of words and numbers.

Community  
Development

Running water - weekly visits to Hydraulic Resources authority over a period of months resulted in approval of the request, but community has to raise money. Requests to CARITAS, Misión Andina, and Bishop of Tungurahua produced some financial assistance; still trying to raise more.

Electricity - six visits to the Electric

Company, no result; matter awaits legal organization of the community.

Repair of community center - accomplished by a community work day, with participation by 120 persons.

Road improvements - group work sessions resulted in improvement of about 4 kilometers.

Creation of town council - three community meetings, four trips to Ministry of Social Welfare resulted in approval of the requests and in definition of town limits.

Outreach - recruited 10 new communities for CEMA-designed course (with El Rosario); course postponed three times by CEMA.

Outreach - recruited and trained young girls as facilitators (with El Rosario); course held March 19-30, 1973.

Note of  
Interest

This community has allied itself with a hacendado in their efforts to obtain electricity. To reach his hacienda, the lines would pass near Puñachisac; after discussions with the Hacendado, they agreed to coordinate their efforts.

Sigualó

Population: 690

Facilitators: 2, one still working part-time as of March, 1973; other terminated after marrying

Classes: Spotty; many nights no class was held because of absence of facilitators. CARITAS food for participants served as stimulus to attend. Ten to 15 participants on a fairly regular basis. Classes halted after October, 1972.

Community  
Development

Community drainage project - participation of 50 persons completed the work in one day; food for lunch donated by CARITAS.

Bridge renovation - after clearance from the provincial council and the teniente politico, community purchased wood and began work on replacing narrow, unsafe bridge.

Note of  
Interest

Both facilitators produced new games on their own--a word game modeled on Concentration, and an elaborate word abacus, both of which were used successfully in classes.

Balsayan

Population: 300

Facilitators: 5, none working as of March, 1973

Classes: Began with good attendance (about 20), tailed

off rapidly when facilitators were defeated in town council elections, lost prestige. Autocratic actions by one facilitator led to retirement of others. Little participation or dialog, but three participants who stayed from December, 1971 through October, 1972 showed significant progress in reading and math.

Community  
Development

Concrete block factory - begun by four of the facilitators; no other participants from community. Blocks fell apart when sand proved inappropriate; because of that and problems of transport, project was dropped. Electricity - after meetings with community and town council request was presented to Electric Company and was approved. An engineer made cost estimates. Communications between facilitators and new town council broke down, however, and project was shelved. Facilitators nominated themselves while still in power; losing election meant their positions as facilitators had lost support as well. This supports idea of democratic selection.

Note of  
Interest

Guasaso

Population: 500

Facilitators: 3, one working as of March, 1973, with an assistant

Classes: Labored under controversy, with active opposition from some community leaders. During the first eleven months averaged from 20-30; now down to about ten. Two facilitators left the community to marry, but the girl who remained is a fireball. Discriminated against for her Indian features, she continues to show great courage and determination.

Community  
Development

Bridge - facilitators led the fight for a law which ordered the bridge to be built near their town instead of upriver. It is presently under construction.

Road widening - the road leading to the bridge had always been too narrow for vehicles, so goods had to be taken to town on foot or muleback. Community representatives fought with the hacendado who for years had squelched any thought of taking two meters of his land on each side of the road. Persistence prevailed in the end, and the

community participated in several work days to widen the road.

Running water - after meetings with the community and with a lawyer, six representatives presented a proposal, which has to date not elicited any reply from Misión Andina.

Forestation cooperative - discussions in literacy classes led to selection of five representatives to call on coop federation. Learning they had to obtain property and dig holes before receiving federation help, they approached six property holders, finally locating one who would let them use some uncultivated land. A coop with 20 members was formed, and dug 1,000 holes. They would have dug more, but the landlord changed his mind and threw stones to drive them off.

Subsequently they secured other land, dug new holes, and some 6,000 trees are now planted.

Outreach - recruited representatives from four nearby communities and held course January 15-26, 1973. Guasaso facilitator was assisted by facilitators from Puñachisac and El Rosario. Ten new facilitators trained.

Note of  
Interest

This facilitator's accomplishments are a result of incredible perseverance in the face of discrimination by the community; she seems to inspire either fierce loyalty or antipathy, not the case in other communities where population is more homogeneous.

Tutupala

Population: 400

Facilitators: 4, all still active part-time; 3 new facilitators trained, 2 working

Classes: Classes held through October, 1972, with attendance about 20. High degree of participation, effective use of games and materials obtained from outside. Classes stopped after group decided they'd learned enough for time being. Will be restarted when felt need is expressed. New facilitators concentrating on organization of training in new skills (weaving and sisal processing) by hiring teachers from outside the community.

Community  
Development

Running water - after four trips to Misión Andina, five community meetings, one visit to the Provincial Council, three meetings with county-level authorities, four visits to CARITAS, nine community work days in which

60 people prepared holding tanks, the situation is in a holding position for lack of funds.

Carbine for night guards - community raised \$90 to buy a rifle; purchase was effected through the provincial governor's office. Three visits to the governor's office were made before the rifle arrived. It is now used nightly by the volunteer anti-thievery patrols, has been fired once, without apparent effect.

Widening of the road - after eleven meetings with authorities, three with an engineer, and three negotiating sessions with the hacendado, 60 people working three days removed tree trunks which had previously made it impossible for buses to pass through Tutupala.

Forestation Coop - two visits to representative of coop federation requesting him to visit the community, one day of meeting in the community, several meetings with authorities to obtain seedlings, fallings out among the coop members--all led to a bank loan, purchase of land, digging of 10,000 holes,



and planting of 7,700 trees.

Community store coop - negotiations with coop authority led to obtaining authorization for coop, now functioning and making it unnecessary to travel 5 km to nearest store.

Community center - \$400 loan obtained from Ecuadorian Development foundation in one visit. Facilitators had prepared a detailed written plan prior to meeting. Construction completed three weeks after loan was granted.

Outreach - 15 new facilitators recruited from four neighboring communities and Tutupala itself were trained in ten-day sessions November 20-December 1, 1972. Monthly follow-up meetings held since; new facilitators have also begun work in two other communities.

Note of  
Interest

When the Tutupala facilitators organized their course, they made certain to gain the cooperation of the priest and teniente politico. Both attended the first day of training. Contrary to normal practice, however, they did not make long flowery speeches. Instead they entered into the general conversation, and asked that they be treated as

campaneros rather than as dignitaries. The facilitators had laid the groundwork well.

Ulpan

Population: 500

Facilitators: 4, 2 still working part-time, aided by one new volunteer who seems to be taking over most of the responsibility

Classes: On and off; appeared to be a dead issue when best facilitator married and left town, but revived later when new facilitator started. About a dozen participants. Classes linked with community activities by weekly meetings together with town council.

Community Development Electricity - negotiations supposedly underway, but little activity or progress visible to the naked eye.

Note of Interest Progress difficult, apparently due to lack of prior preparation of community (this was one of the last-minute replacements), plus difficulty of access, which meant very little follow-up.

General Comments on Implementation

Classes

Each of the seven communities began classes in December, 1971, immediately after the training session. A total of

237 people showed up at the outset to see what was going on; of those, 164 began attending the classes. For the first two months, the facilitators were given no materials other than the Ashton-Warner method and the Hacienda game, although they were encouraged by the trainers to obtain materials from other sources, and some did so.

#### Dropouts

No decision was made at the outset as to how long the classes should continue, whether there should be a summer break, and so on. The organizers waited to see what happened in each community. After learning from the Department of Adult Education that from their experience campesinos would simply not attend classes for longer than six months at a stretch, the project staff were pleasantly surprised to observe that when UMass evaluations were made in May, June and September, the number did not diminish drastically. The tests, given without advance notice, found in May there were 134 persons in attendance, in June 130, and in September 127. After September however, when the CEMA contract terminated, numbers dropped off. CEMA evaluators in October found only 103 participants. Four of the communities later suspended classes; some of those just ran out of gas, but in at least one of the communities (Tutupala) it was because the immediate felt need for

literacy classes had been satisfied, and the facilitators decided to concentrate on community development activities until such time as members of the community requested reestablishment of the classes.

#### Drop-Ins and Individualized Instruction

One interesting factor in this dropout analysis is that although numbers did not fall off, those attending in October, 1972 were largely not the same people who began in December, 1971. Only 44 of the original 164 were still in the classes. The others had begun later. No one was able to say how many people might have dropped in and then dropped out again during the period between December and October. In other words, a considerably larger number than appear at first glance had taken part in the classes. This might be called "drop-out with replacement," which is interesting for at least two reasons: (1) This phenomenon is all but unheard of in more structured class settings, where stigma is attached to irregular attendance. The facilitator project was consciously organized on a non-schooling model, however, so people felt free to attend long enough to learn to write their names, for example, and then to leave--perhaps for good, or perhaps to return another day with other needs. The dropouts remembered the process of the meetings, and other community or

organizational gatherings were transformed as "el dialogo" became an accepted meeting style. (2) This behavior illustrates the kind of "individualized instruction" the model provided. There being more than one facilitator, tasks could be split up, and each could work with different people interested in different problems. There was no need to maintain a lock-step standard curriculum. Each participant was free to ask help in whatever he felt he needed at the moment, and did so. No two evenings were alike.

#### Evidence of Learning

Some learning did take place, although as noted above it is difficult to verify using normal evaluation methods, since the situation is messy by comparison with a regular classroom. The CEMA evaluation team was able to demonstrate, however, that the 44 people who continued through the eleven months showed (t-test, .05 level) significant improvement in their reading and math abilities. The Comprehensive Achievement Monitoring test applied by the UMass staff showed clear gains in math abilities from May to June, following the introduction of six number games in late April. September results were not as conclusive, but this can be rationalized by looking at the turnover figures. These and other evaluation results will be treated at some length in chapter eight.

### Use of Materials

CEMA evaluators found that of the nine games introduced during the year, all but one were being used regularly in almost all the communities (see chart, chapter eight). The facilitators also proved very adept at adapting the materials to suit their needs. The Ashton-Warner method and the Hacienda game, as mentioned in previous chapters, were changed by the facilitators in each community--doing away with some steps of Ashton-Warner, expanding the Hacienda game to many times the number of players originally envisaged, addition of new situation cards to reflect current circumstances in the community and so on. Other ideas were also modified. UMass staff encouraged this by not providing written rules for any of the techniques.

There was some evidence of ability to develop new ideas as well. In several communities facilitators invented new game ideas and used them in the classes. In others, facilitators made extra copies of games distributed by the UMass staff.

### Relations of Classes to Community Development

CEMA evaluators developed a scale to reflect the degree to which facilitators encouraged participation in the classes. They found a direct relation between community development activity and a high degree of participation and

dialog in the sessions. They attributed success in community development to the involvement and interest created by the dialog process.

The dialog involved in the Ashton-Warner method thus seems to be fulfilling its promise to provide a link between literacy and community development. The facilitators were coached at the outset to reinforce discussion of problems revealed by the choice of participants; words--"agua" for example led conveniently to discussion of how participants obtained water, what alternatives there might be, the need for more information, a trip to the appropriate office, and further discussion of the new information thus obtained. This process of course is not automatic. It requires practice and continuing effort on the part of the facilitators, but experience suggests that it becomes easier once people become accustomed to talking about questions that were previously only felt, never mentioned. The number of community development projects undertaken by the communities (see next section) attests to the efficacy of the process in leading to concrete action.

How long the dialog will last, and whether the idea of discussing problems in an open forum will become self-sustaining in a community, remains to be seen.

### Community Development

More or less directly resulting from the literacy/consciousness-raising process, community development projects are a necessary outcome without which there would be much less tangible reinforcement for the effort invested by participants in the sessions. Experience during the first year of the facilitator project showed that enough happened to provide substantial credibility in the eyes of the communities for both the facilitators and the process.

The seven communities began work during the year on 26 separate projects. Thirteen of those were followed through to a successful completion, two were admitted failures, and as of March, 1973, eleven continued in process. The as-yet-uncompleted project are being pursued by the facilitators.

It is instructive to look at a step-by-step account of one of the projects to get an idea of the effort involved. Tutupala had wanted for years to obtain bus service, but one part of the dirt road leading to the village was too narrow for buses to pass because of a row of trees belonging to the local hacendado. The following is an account from the CEMA evaluation report of the steps followed by the Tutupala community to negotiate the bureaucratic obstacles in order to clear the trees themselves.<sup>3</sup>

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<sup>3</sup>"Informe Final," op. cit., p. 9 of annex.



<u>Activity</u>	<u>Problems Encountered</u>	<u>Results</u>
Request for approval from the Ministry of Social Assistance		Request was approved but community was not so informed
Three visits to the political chief to learn whether the request had been granted	The chief refused to reveal that the approval had been granted	
Two visits to the headquarters of public works	Group was told it would have to pay for the trees	
Collection of signatures of community members for another request for authorization	People were worried about what would be done in retaliation for signing	
Two visits to the area governor's office to request an audience	Both times impossible because of the hacendado's influence and belittling comments from the staff	
Interview with the governor		Governor visited the community to inspect the situation
Visit to the provincial governor in Riobamba		
Trip to Riobamba to bring engineer inspector from public works		Inspector inspected the situation
Visit by inspector to the owner of the trees	Three additional visits necessary before owner would do what he had agreed	

<u>Activity</u>	<u>Problems Encountered</u>	<u>Results</u>
Final visit to inspector in Riobamba	Inspector was on vacation	
Three days donated work by sixty persons from the community	Owner impeded the work one day	Trees removed

Through all of these dealings the facilitators did not become embittered or disillusioned. Instead they became more adept at the kind of persistence and infighting needed to achieve results. It is clear from conversations that they relished the feeling of accomplishment that comes from even a small victory after a long battle. It was more than they had expected at the outset.

#### Negotiation Skills

To achieve the results mentioned in preceding sections, campesinos have had to change their traditional behavior patterns vis-à-vis authorities. Two anecdotes will serve to flesh out the way facilitators have learned to get results.

**Renting films:** Jorge Freire Benalcazar, a facilitator preparing a course for campesino leaders, used films to create interest. Having shown USIS Apollo films a number of times, he needed something with a plot line. The people wanted Tarzan, but no Ecuadorian distributor carried Tarzan films. Having been told that Columbia Films had a distribution center in Quito, he came looking for a cowboy film.

Columbia had a strict rule written on the door--"No one may rent films without leaving a deposit of 500 sucres (\$20)." Jorge didn't have 500 sucres. Also, Columbia did

not let the films out for longer than three days, claiming that they were in such heavy demand that they could rent them twice weekly. Jorge needed the film for a week. Finally, Columbia does not let films go out to someone (especially a campesino) unknown to them. For this Jorge needed a witness, so he brought a gringo--who of course was unknown to Columbia, and who showed no identification, but who served.

Jorge never raised his voice or insisted, but stated clearly what he was doing, why he needed the film, that he didn't have the money with him, that he couldn't get back to Quito in less than a week, and so on. He was the model of reason and patience.

Jorge came out with a cowboy film. He did not leave the 500 sucre deposit. He obtained the week he needed. His gringo said absolutely nothing--there was no need.

When asked later if he would have acted the same before his training as a facilitator, he said. "Of course not. Before, I would have listened to their requirements, and gone out to see if I could find some way to meet them. Campesinos generally become humble very quickly when they're up against a demanding bureaucrat. But now I know that I have my requirements and preferences just as he does--so we just talk it out, and decide whose preferences we're going to honor. Besides, they told me in Ambato that these people are like that. What he was looking for was a tip. I wasn't going to give one, and he realized it--so he ended by renting it to me as he should."

One skill of negotiation is knowing what your "adversary" will buy and what he won't.

Obtaining a loan: When the facilitators from Tutupala came to Quito seeking a \$400 loan to build a two-room concrete block community center, they came prepared. Instead of the traditional campesino approach--hanging around outside an office building until some secretary accepts a small "tip" to let them in, then remaining almost mute in the face of relative luxury, and finally facing the inevitable mestizo bureaucrat who perhaps without even trying makes them exceedingly uncomfortable. The Tutupala facilitators came with a plan. The plan was not just in their heads--"Let's try to approach him this way"--but was written out, beginning with the reasons the communal house was needed, going on to how the money would be used, and over what time period, who would do the construction, and so on, and concluding with a well-reasoned plan for repayment.

This situation, although possibly not unprecedented, was certainly unusual for the office of the Ecuadorian Development Foundation. They couldn't fault the plan, as it answered all their questions. They did question the credentials of the facilitators, asking whether they in fact represented the community. Being officers in the town council as well as in their new forestation cooperative, they had a ready answer, but invited FED functionaries to the community anyway, assuring them that they would hear exactly the same story there.

FED's normal procedure when it receives a loan request from campesinos is to send out a field man who checks out the situation, talks with the people, and prepares a plan. The process generally takes a couple of months. In this case it hardly seemed appropriate.

Two weeks after the Tutupala facilitators turned in their request, the head of FED appeared in Tutupala. He had \$400 in cash with him (the campesinos had requested the money in cash, to save them going to Riobamba or Quito to cash a check, and the loan was effected that afternoon.

#### Problems

Follow-up was one of the major problem areas for the original facilitators. Although both CEMA and UMass had intended to visit each community once a month, it proved more difficult than had been anticipated. Weather was uncertain, and several of the communities are impossible to visit when it rains. Also staff became discouraged after investing several hours effort to arrive and find class canceled for a funeral, fiesta, or some other reason. Thus some of the communities were visited only seldom, say twice during nine months. These were also the weakest centers. These factors seem to reinforce one another--a poor center isn't much fun to visit, and a center which is

ignored becomes demoralizing for the facilitators.

Again and again the facilitators stressed to project staff the importance of regular contact with outsiders who would come with time to sit down and talk over problems. That they felt strongly about this problem is borne out in the next chapter, where we shall see that the facilitator organizers of new training courses arranged to have monthly get-togethers with the whole group, spending an entire Sunday discussing progress and problems in each community. By March, 1973, three such meetings had taken place following the November, 1972 training session in Tutupala.

The other major problem or danger area is the facilitators' relationship with the outside support agency. CEMA's tendency was to remain in the driver's seat, organizing follow-up sessions and planning new training courses themselves. This was partly an exigency of their financial situation. For the organization to survive, it must have contracts; to justify being paid, CEMA's trainers must train people, do the planning, follow-up, evaluation and so on. This paternalistic tendency was reinforced by the decision to pay salaries. The CEMA coordinator's principal function on visits to the communities was to bring money. That fact led quickly to an employer-employee relationship between CEMA and the facilitators. The campesinos used group pressure at the very beginning to get their

wages raises; at one point they went on record as saying their salaries should be picked up by the ministry of education, and they should be put on the social security rolls. It was only a matter of time until the situation would have arrived at collective bargaining to determine how many hours a day facilitators would put in before being entitled to overtime, how much per diem they would collect for trips to Quito as compared with trips to the provincial capital, and so forth; fortunately CEMA's contract ended before negotiations reached this stage.

This illustrates some of the dangers of an employee mentality for the facilitators--more time is easily spent on organizational concerns and infighting than on accomplishing what people have come together to do in the first place. Further, there is simply no money available to fund that kind of endeavor, even if it were a good idea.

The new facilitator generation has not had to consider this problem, since the understanding was clear from the outset that there was no source of funding to pay wages. They see their rewards as directly linked with community development and change. The Tutupala facilitators, who ran the first training session, emphasized this point, and could back it up by showing off their cooperative community store, their forestation coop, and their plans for other economically rewarding community activities. The facilitators as

well as many other community members are benefiting from these projects. The Tutupala facilitators followed through on the participation idea in the founding of the coops as well; instead of the traditional "strongman" who knows how the organization works and keeps it to himself, every member of the forestation coop made at least one trip to the provincial capital to see and converse with officials of the coop federation.

Thus both of the major problems encountered by the project in its first year, follow-up and paternalism, may be largely solved as the model is modified and generalized by the facilitators themselves.

#### Promising Aspects of the Project

##### Nonprofessional Change Agents

Campesinos as change agents within their own communities have a different interpersonal style than that of professional community development types. Our experience shows this egalitarianism, although born of necessity, can be a considerable virtue. Facilitators are seen by their peers as fallible equals with whom one can talk. This relationship appears to be weakened somewhat when facilitators receive salaries. The extra money and outside loyalties inevitably affects their status in the community.

Another advantage of local change agents over professionals is that they can pursue multiple goals instead of

concentrating their efforts on one area which produces good-looking results for agency reports, but which often do not represent maximum benefit for the community. Local agents can afford long time horizons as well, since they are not facing a contract cutoff. They can keep up the exhausting series of follow-ups which seem to be a necessary precursor to any community development, and press hardest on whatever prospect seems likely to produce results while letting the others jell.

#### Horizontal Spread of the Idea

We adopted the idea of campesinos training campesinos for two reasons: (1) it seemed the only model which offered economies of scale; and (2) the campesinos were willing and able to make contacts with neighboring communities. Once we had expressed our conviction that the facilitators would do a better job than we could at telling others about their activities, they took the idea and ran with it--straight to their neighbors.

The traditional model would have involved professional trainers repeating the original training session, suitably modified, for facilitators selected from new villages, as well as offering refresher courses for the original facilitators. We need not belabor here the relative costliness of such a venture. Our position is that not only are



campesino trainers cheaper, they are probably better than outside professionals could be for the kind of training they are doing.

Campesinos have the advantage of knowing what the local problems are. To acquire new ideas on what to do about them, we recommend in chapter nine the founding of a resource center to which campesinos would have access-- indeed it should probably be campesino run. This center would have or be able to get information which campesinos need to talk intelligently with each other about what their options are, and with officials about what they want to do. Some activity of this kind is already going on, with CEMA and UMass serving as informal resource centers.

## CHAPTER VI

### SPREAD OF THE IDEA

If the facilitator project had been implemented solely for the original 24 leaders and 7 communities, its cost per participant would have been very high. AID officials had been worried about this question from the outset. Repeating the original design in other communities, using costly consultants and paying salaries to the participants for the duration of the project, would have offered little potential for economies of scale. Thus a modification of the design was necessary, and it was achieved in large part by the facilitators themselves as they began making contacts with surrounding communities. Those contacts resulted in facilitator-organized courses, based on their training and experience, in which no professionals took part. It is that "spread effect" with which this chapter is mainly concerned.

The following pages describe dissemination-oriented activities in four of the seven original facilitator communities. In Tutupala, a course for representatives of five communities was held in late November, 1972. Two other communities, Puñachisac and El Rosario, jointly held a course for young women from seven communities in March, 1973, and worked with CEMA in preparation for a repetition of the original facilitator course for ten new communities which took place in April, 1973. In Guasaco the facilitator after visiting the Tutupala course prepared a similar seminar for four communities, which was carried out January 15-26, 1973.

Tutupala: The First Facilitator-Run Course

During the latter part of summer 1972 the facilitators from Tutupala began to make contacts with a number of surrounding communities regarding the possibility of putting together a course. Their approach was to share with them what had been taking place in Tutupala during the year, and to offer to train them in the literacy/conscientization techniques which the Tutupala facilitators had been using. They met with some initial success, holding meetings with town councils, priests, tenientes politico and the general population of a half-dozen area communities. They had decided from the first year's experience that making initial contact with the power structure was a necessary factor which had been underemphasized the first time around.

In October, 1972 with strong expressions of interest from several communities in hand, the facilitators approached CEMA to begin to plan the course. However, at that time CEMA was placing first priority on a course being planned for Punachisac, and told the Tutupala facilitators that any decision regarding their course would have to wait for the results of the Puñachisac effort. CEMA was not sure how much money would be available, and no one knew how expensive the Puñachisac course would turn out to be.

If they had money left, Tutupala would be next in line. CEMA could not give them a date at which they would be able to make a decision.

The Tutupala facilitators were discouraged by this ambiguity, and entertained thoughts of abandoning the project. Instead, they went to the University of Massachusetts project office. In conversation with UMass staff, they learned there were other possibilities: UMass could intervene on the facilitators' behalf to see about obtaining the funds from USAID; or the course, if it were kept to a minimal cost outlay, could if necessary be funded from the UMass project budget. These possibilities revived the facilitators' enthusiasm, and that afternoon they laid out a rough course plan. A free translation follows:

#### TUTUPALA COURSE PLAN

- |              |   |
|--------------|---|
| Objectives   | <ol style="list-style-type: none"> <li>1. That the campesinos from the participating communities place a higher value on their own self-worth.</li> <li>2. That campesinos teach each other to read, write, and negotiate.</li> </ol> |
| Organization | <p><u>Facilitators:</u> Fausto Valdivieso, Mesias Silva, Angel Paredes, and Eliecer Valdivieso</p>  |
| Activities   | <ol style="list-style-type: none"> <li>1. <u>Facilitators:</u> October 9-November 5. Visit the communities: San Francisco, Santa Rosa, Chocabi, Pulug, Tutupala,* Asaco Chico.</li> </ol>   |

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\*The facilitators wanted to prepare a "second generation" to help in their own community as well.

Activities  
(continued)

- a) Purpose: choosing the participants
- b) Qualifications for participants:

- 1) elected by the community
- 2) } more than 15 years old
- 3) } can be men or women
- 4) } know how to read and write
- 5) } should be stable in the  
community (not a new arrival  
or someone likely to leave).
- 6) should have the support of  
the community

2. Negotiations:

- a) CARITAS - check possibility of  
obtaining food for the course
- b) Bishop of Riobamba - for possible  
participation
- c) Priest of San Ysidro - for possible  
participation
- d) Teniente Politico of San Ysidro - for  
possible participation

3. Meeting place, housing, food:

- a) talk with Pablo Valdivieso to see if  
he will loan or rent his large house
- b) find and contract a cook

4. UMass responsibilities:

- a) check with AID re: money
- b) prepare materials:
  - 1) Hacienda games
  - 2) El Mercado Games
  - 3) Letter Rummy games
  - 4) letter and number dice
  - 5) loan a petromax lantern
  - 6) notebooks
  - 7) pencils
  - 8) at least one UMass staff  
member to be present as  
an observer during the  
course

Activities  
(continued)

5. Budget:

a) facilitators will:

- 1) send UMass a food budget after checking with CARITAS about food
- 2) decide with the participants whether they will require remuneration during the course (10 sucres per day per person is available)

b) Tutupala facilitators will each receive 100 sucres per day during the 10 days of the course

6. Plan for the course - Facilitators will send to UMass a plan of action for each of the 10 days of the course.

Two points in the above plan merit comment:

First, the facilitators did not see themselves as employees of either the University of Massachusetts or of AID--nor did they want to. The contract was worked out on a consultancy model. The 100 sucres (\$4) per day which the Trainers received during the course was to come to them only if the course actually took place. That is to say, the course was their idea, and they would take responsibility for all preparations and risks. The money, to be paid at the end of the course, was basically intended to be a kind of consulting fee which would reimburse them for their efforts of the previous months as well--since the going wage in the Tutupala area is only 10 sucres per day. Like a consulting firm, the facilitators used their own resources and time to negotiate the course, realizing nothing if the

arrangements fell through, but earning considerably more than a regular day's pay for the duration of the workshop if it took place successfully.

Second, the course was sponsored by the community itself, rather than by any agency. Further, the facilitators preferred to converse with several institutions regarding participation. They knew from experience that to confide fully in any organization is to invite disaster-- that one must hedge his bets, as it were. Partly for this reason they did not give up when they could not reach an agreement with CEMA, their first choice as a collaborator. This idea was brought up later in the course itself, when the topic of campesino treatment by authorities was discussed for a full day.

Between October 9 and the end of the course on December 1, virtually every one of the above responsibilities was carried out by the persons designated. The facilitators visited each community several times, setting up meetings, discussing problems and possibilities, and seeing that participants were selected. Not all of the original communities decided to participate. One opted out for lack of interest, and another after selecting participants backed out at the last moment for fear that the course was inspired by communists. However another, Tembo, not mentioned in the preliminary list, decided to take part and

sent 3 participants.

CARITAS was approached, but could not help because the organization was involved in internal difficulties which had temporarily closed down their provincial distribution program. The Bishop of Riobamba expressed interest, but because of prior commitments could not attend. Misión Andina, the government development agency, loaned dishes and cutlery.

Both the priest and teniente politico for the region turned up on the first day of the seminar, expressed their approval of the goings-on, and asked the participants to refer to them as "compañeros" rather than the more formal manner in which they are customarily addressed.

The facilitators did not have to rent Pablo Valdivieso's house for the sessions. About one month before the course was scheduled to begin, Tutupala obtained a loan from the Ecuadorian Development Foundation for the construction of a community center. They used their new negotiating skills to expedite matters, as was mentioned in more detail in the preceding chapter.

Once having received the loan the villagers wasted no time in beginning construction. Although the bricklayers were still working during the first week of the course, construction of the two-room concrete block building was virtually completed in three weeks, and served as both



meeting room and sleeping quarters for the participants.

A cook was also located and hired by the facilitators.

UMass carried through on its end. We discussed the proposed course with AID education officials, recommending that they underwrite this first move toward a "horizontal expansion" of the facilitator idea. AID accepted the recommendation, and put aside 12,000 sucres (\$480) for course expenses, following the budget prepared by the facilitators.

BUDGET FOR TUTUPALA COURSE

	<u>Sucres</u>	<u>\$ US</u>
3 Facilitators* (one month of preparation, 2 weeks of course)	3000	120
23 Participants for 10 days at 10 sucres	2300	92
1 Cook (10 days at 60 sucres)	600	24
Food	3500	140
Course Materials	1500	60
House Rent	100	4
Wood, Straw Mats for sleeping, etc.	1000	40
	<hr/>	<hr/>
	12000	\$480

\* Angel Paredes was excluded from the budget (see below).

Five communities participated in the seminar: Tutupala, Tembo, San Francisco, Pulug and Chocabí. Sixteen chosen representatives attended, including two young women.

A course plan was prepared by the facilitators well in advance of the course, and was followed with only slight

modification.

Monday, November 20:

1. Welcome
2. Creation of confidence among the participants
3. Determination of seminar schedule with the participants

Tuesday:

1. Discussion of the nature of the seminar
2. Sharing of problems in the communities--  
general discussion
3. Exercise: Who am I?
4. Hacienda Game

Wednesday:

1. Discussion of Hacienda Game
2. Blindness experience
3. Discussion: Problems in communication

Thursday:

Discussion: Specific problems and interests of each  
community

Friday:

Discussion: How campesinos are treated by authorities

Monday, November 27:

1. Exposition: the six steps of the Ashton-Warner method
2. Practice of the steps

Tuesday:

1. Sociodrama: the teaching of literacy
2. Discussion of the sociodrama

Wednesday:

1. Practice of the steps in community groups
2. Reflection on the Ashton-Warner method
3. Hacienda game again

## Thursday:

1. Blind Leap experience
2. Discussion of problems in applying the method
3. Introduction and practice of other games: El Mercado, letter and number dice, letter rummy
4. Making copies of letter and number dice: one per participant (blank dice furnished by UMass)

## Friday:

1. Negotiation: Plans for each community
2. Review of the seminar
3. Farewell

The new facilitators went back to their communities with considerable optimism. They had made varying plans of action. For example, Tutupala decided to de-emphasize straight literacy training. The major responsibility of the facilitators was to help set up an artisan cooperative, to decide with its members what skills are most needed, and obtain the services of experts in the area to give short-term classes. One training area envisioned was the cleaning and preparation of sisal, which is a major crop of the area. Until then, the community had only harvested the sisal and transported it to the nearby town of Guano for processing. Learning to do that work themselves promised a new source of income for the community. Literacy training was to be included as needed by the participants.

The plans made by the communities can be outlined in general terms as follows:

1. All the centers planned to teach literacy and work toward setting up a cooperative store similar to Tutupala's.

2. Tembo and San Francisco were to begin to negotiate with INERHI, the National Institute of Hydraulic Resources, to obtain running water. Tembo also planned to work on enlarging and finishing their plaza and community center.
3. San Francisco was already making plans to run a similar seminar for other neighboring communities.
4. Also, in each of the communities the facilitators were to begin searching for ways of raising money for a petromax lamp, for bus trips to town to meet with officials and so on.

The performance of the Tutupala facilitators was impressive. They were at all times in command of the situation without dictating what went on, even though their work as a team was marred slightly by a dispute between Angel Paredes and the other three. During the months of preparation Angel, the only bachelor among the four, was not as serious as the others in their meetings with other communities, and tended to drift off and dance with the local girls. Mesias, Eliecer, and Fausto had decided to bar Angel from participation in the training and from being paid (this is reflected in their budget), but in discussion with the UMass staff on the first morning of the course, they relented and decided that he could participate, and should be paid--but only 1/3 of what the other three received, since a large part of the work had already been done. He then did participate effectively during the two weeks, but got into another scrape at the end, when some pictures which the facilitators had taken of the group disappeared, and Angel was suspected.

The three key facilitators' skills were complementary. Mesias was the group's informal leader, slow of speech but forceful and insightful; Eliecer, probably the most brilliant of the three, continually injecting suggestions and new lines of thought; and Fausto, the perpetual questioner during the discussions, forcing the participants to think through their sometimes glib echoes of what the Tutupala facilitators had said earlier.

Follow-up was taken care of largely by the Tutupala facilitators, with occasional visits from UMass staff. The first follow-up meeting of the group was held February 5 and 6, 1973, in Tutupala, to discuss problems and accomplishments. The Tutupala facilitators know from their own experience the importance of having someone from the outside with whom one can discuss and interchange ideas. This get-together was held without any outside sponsorship; all costs were absorbed by the facilitators and they ran the meeting.

The session revealed that seven centers were underway, instead of just the five original participating communities. The facilitators in Pulug and Tembo had divided their forces and started work in two new communities in response to invitations, and following some internal disagreements. It was too early to gauge success, but all communities were active. They agreed to meet again March 18 in Chocabí, and did so. That meeting concentrated on the Chocabí

facilitators' problems, and was attended by both the general public and the town council. They agreed to give more support to the facilitators in the future. Once again, the day-long session was organized without outside intervention. The facilitators decided to continue meeting monthly, but did so only one more time, in April. At that meeting a sense of frustration was present. UMass had not delivered the extra games and other materials they had promised in March, and the difficulty of travel to the somewhat far-flung communities was beginning to be felt. Activities continued thereafter, with several of the communities continuing to meet regularly at least until the end of the academic year. Details are scarce, however, since UMass staff have intentionally not made regular visits, in accord with the original agreement that responsibility for the course and follow-up belonged to the facilitators.

The following case illustrates two models: The Puñachisac facilitators worked with CEMA to more or less reproduce the original training model with representatives of ten communities. At the same time, however, the facilitators of Puñachisac and El Rosario themselves put together a new kind of course, in which 22 young women from five communities were trained as facilitators, with emphasis on organization of activities centering around the home, and on involving more women in the change process.

Puñachisac/El Rosario Center: A Course  
with CEMA, and Another for Young Women

CEMA

Jorge Freire Benalcazar of Puñachisac was the first facilitator who actively began a campaign to reach nearby communities and discuss the process going on in Puñachisac. Using a projector and generator borrowed from CEMA, and films loaned by USIS, he hired taxis to take him and his equipment to take him to outlying villages, where perhaps a hundred people would pay two sucres (8 cents) to watch the films. Jorge used these occasions to discuss Puñachisac's activities in literacy and community development. Part of the money he collected was used to defray expenses of taxis and meals, and what remained became a fund for Puñachisac's development activities.

The Hacienda game was also used as a device to create interest. The Puñachisac facilitators walked considerable distances to neighboring villages to present the game, play it, and discuss some of the issues raised during the session.

These activities took place over a period of about six months, beginning in the spring of 1972. As a result 10 communities either expressed more than passing interest or committed themselves firmly to attend a course to be organized under CEMA's auspices in September or October, 1972.

Negotiations were begun with various agencies to work out space for the course, financing, and other arrangements. Although the first thought had been to hold the course in Quero, the nearby capital of the Canton in which Puñachisac is located, and the local priest had offered the group the use of a new school, housing for the participants was unavailable. After some thought Ambato, the much larger provincial capital, was decided upon, and Jorge Freire through negotiations with the bishop was able to obtain the Diocese's conference center, complete with conference and lodging space, without charge.

However, problems arose in discussion with CEMA over financing. The original facilitator training contract had expired. AID money was not available for the course, because AID officials did not want to repeat the original design. In the fall of 1972, World Neighbors, an independent US-based development organization, had given CEMA a grant for community education activities, but CEMA was not certain whether the money could be used for the course. Another possibility was discussed: CEMA could use money received as overhead from other contracts, to self-finance their work with campesinos. However, no decision was reached in time to permit the course to take place in October, and it was rescheduled for January 15, 1973. The bishop agreed to provide the conference facilities at that



time, and the selected participants (chosen by their communities as facilitators) expressed their willingness and ability to attend the course at the later date. Jorge continued during October and November to use movies as an interest-sustaining device, and was aided in community contacts by Cezar Bastidas, the senior facilitator from El Rosario, who acted as the primary contact for three of the new communities.

#### Course for Young Women

Jorge Freire took a number of ideas away from the Tutupala course, and developed his training skills in the Guasaso course held in January, which is described later in this chapter. A variation of the facilitator idea seemed to him worth trying. He suggested the possibility of training young women as facilitators who would concentrate on development activities that would increase women's involvement, and Cezar Bastidas of El Rosario agreed to help.

In rural Ecuador a woman's place is definitely felt to be in the home, and public silence is their accepted behavioral code. Women guide their men home when the Sunday afternoon drinking session ends, and so on. But Jorge felt, maybe from talking to his own wife, that the time was ripe to heed the winds of change that are sweeping

the world.

Jorge and Cezar set out in February on the by then familiar task of contacting new communities. People were interested in the idea, and in a month some 20 young women aged 15 to 25 had been chosen by their communities as participants, their parents' permission obtained, and the course was scheduled for March 19-30, 1973. UMass cooperated, and a building in Quero was rented to serve as both training center and dormitory.

Jorge's wife Hilda had agreed to serve as cook and chaperone, but the two facilitators realized that it was not appropriate for two men to run a course that had strong implications for the changing role of women in Ecuador. They had been impressed earlier with a young woman from the Ecuadorian Volunteer Service whose work among campesinos had been outstanding, and they invited her as a trainer.

Nineteen participants from seven communities showed up for the course. The subject matter leaned heavily to the role of women in rural areas, and discussion was lively. The girls also learned how to use the Ashton-Warner/Dialog method and the games, and at the end of two weeks returned to their communities.

No one was quite sure what form the girls' work would take when they returned home, but they did begin activities. In a couple of communities they organized nightly literacy

classes, whereas in others they worked with existing organizations involved in development. No formal follow-up sessions have been held, but both the trainers and participants believe the course was worthwhile and contributed to a growing new dimension in the lives of rural Ecuadorian women.

In the next case we look at a course organized by a woman, Eufemia Lara of Guasaso, based on the Tutupala model but using Jorge Freire and Cezar Bastides as trainers.

#### Guasaso

Eufemia Lara, the only remaining facilitator after the other two married and left Guasaso, visited the course given by the Tutupala facilitators, and was impressed with the idea. She began in early December to contact surrounding communities. Overcoming prejudice against her sex and her Indian features, Eufemia covered the area around Guasaso. Finding considerable interest, she enlisted the aid of two of the Tutupala facilitators, and on December 20 wrote a proposal directed to CEMA for a training session involving eight communities. The course was to be virtually identical to that of Tutupala, utilizing in addition to Eufemia one local leader and two of the Tutupala facilitators as trainers.

Following is a free translation of Eufemia's proposal:

Guasaso 20 December 1972

TO THE DIRECTOR OF CEMA:

A course in concientization has been planned with the communities of Pungal, San Pedro, Santa Mariana, Guasaso, Tumba, Bayo, Zizate, and with community leaders from Quimiag. Three people will participate from each of the above-mentioned communities. I have already interviewed them, and they understand and are in accord with the purpose of the course.

The course will take place in a house belonging to Señora Dolores Vallejo in Quimiag. It has all the furnishings necessary.

The length of the course will be 10 days, beginning the 15th of January, 1973, and ending the 26th of that month, Monday through Friday of each week.

Objectives of the course:

1. January 15-19: Concientization
2. January 22-26: Literacy methods
3. Also: Ideas which the participants will take from the course for the promotion of union in their communities.

(There followed a brief schedule very similar to that of the Tutupala course.)

CEMA was unable to take action with respect to the request, as they were still considering the Puñachisac course tentatively scheduled for the same time period. Upon learning this, Eufemia approached the UMass staff. We agreed to intervene with AID for funds, and to provide materials and observers as was done in the Tutupala course.

A sticking point arose over the facilitators' proposed trebling of their "consulting fees" for the Guasaso course; i.e., instead of 100 sucres per day they proposed 300.

Negotiation with the UMass staff convinced Eufemia to reduce this to the original figure, since (1) it would have been impossible to obtain AID approval of the higher figure; and (2) even if UMass were to underwrite the higher figure for this course, it could not have continued to do so, and the facilitators spoke of having plans to conduct several courses.

We made a counter-offer to pay the Tutupala facilitators  $1/3$  of Eufemia's fee, or 35 sucres a day, since they would be participating only in the course itself, leaving the formidable task of preliminary arrangements to Eufemia. This was in fact what they had decided to pay Angel Paredes in the Tutupala course. The Tutupala facilitators then declined to take part in the training, offering instead to come and visit the course for a day without charge. As we learned later, the proposed fee hike was a stratagem by the Tutupala facilitators to achieve at least temporary exit from the strenuous effort of training.

Eufemia was left to complete arrangements for the course. She knew however she would have to obtain help for the course itself, since one person could not do it alone. She contacted Jorge Freire Benalcazar and Cezar Bastidas, who readily agreed to take part. Jorge having sat in on the Tutupala course needed no orientation; Cezar, by nature a showman and extrovert, needed no persuasion, seeing the

course as an opportunity to obtain experience for the courses he and Jorge were planning. He tuned his guitar and came on a week's notice.

Instead of some 20 persons from six communities, eleven participants from four communities (Cun Cun, San Francisco, Quimiag, and Tumba) showed up for the course. This was not a great disappointment, since something similar had taken place in both the original training and in Tutupala. Fear of communists and evangelicals not necessarily in that order makes entrance into many communities difficult.

The participants were young, most in their early twenties. Half were women. The course followed the pattern of Tutupala, and appeared to be very well received. The trainees overcame early shyness and participated vigorously in exercises and discussion. They spent one day in dialog with university student volunteers, except for which the schedule was virtually identical to that of Tutupala. Eight people completed the course, and made plans to begin their own groups in early February. The others had to return to their communities for a variety of personal reasons before the course ended.

The participants' discussions brought unanticipated results, such as a statement of the Different Strokes for Different Folks principles: "What is bad for people of the

city may be good for us. For example, city people think agriculture is dirty; the campesino works in agriculture because it is what he likes."

Because fewer people attended than had been anticipated, the course cost less than the proposed budget. Total cost for the two weeks was about \$340. It was not as impressive as the earlier Tutupala course, but in any case after two months there were three centers functioning, with about ten participants in each, and some possibilities for expansion, depending on the outcome of conversations with local authorities who were still not convinced that a course organized by an Indian woman could be worth anything.

#### Analysis/Tentative Conclusions

Analysis must begin from one salient point: In the three cases where facilitators were responsible for all facets of the courses, both planning and execution went off without any delay. In the other, initial interest was high, but because of extraneous problems the original schedule could not be kept, and the course took place some six months after it was originally scheduled.

The basic point is that campesinos demonstrated they are capable of organizing and running a basic education course for other campesinos. Further, they are acceptable to other campesinos as trainers. This has fairly large

implications for rural education and development. Deprofessionalization would alleviate many problems of both cost and curriculum, since campesinos (a) do not command professional salaries; and (b) have a pretty clear idea at the outset as to what kind of learning is needful.

Delays in the Puñachisac course were caused by the kinds of difficulties that are endemic to any organization, and for which no one can be harshly faulted. The most instructive conclusion that perhaps can be drawn from that experience is that extraneous bureaucratic considerations should be kept to a minimum by allowing the planning and implementation of rural basic education to be as completely in the hands of the campesinos themselves as is possible. This is not to say that the funding agency should feel that signing checks is help enough. In all the cases discussed in this chapter, facilitators expressed aloud their appreciation of having outsiders to talk to about their planning. They weakened in their follow-up when it seemed that no one else was interested. The Tutupala facilitators said clearly that it was very hard work, and indeed opted out of the Guasaso course. Perhaps the funding agency's role can be summed up as providing a supporting presence without imposing stringent prerequisites.

What possibilities are there for replacing UMass as an "intervenor" with funding agencies? We will look further



at this in chapter nine, but one possibility is that Federations of Campesino Leaders might take over much of that function. One such federation was formed in mid-1973 in the Province of Tungurahua, where Puñachisac and El Rosario are located. Its activities include fomenting change, and they plan to use some of the UMass materials in their contacts with new communities. People like Jorge Freire Benalcazar working with such a federation could quickly pick up the "intervening skills" that UMass provided this time around, and funding organizations are increasingly responsive to proposals coming from indigenous organizations.

CHAPTER VII  
THE RADIO MENSAJE PROJECT

The Radio Mensaje project in Tabacundo is based on the use of cassette tape recorders as a feedback device in rural radio schools. The recorders are the responsibility of "auxiliares," unpaid non-professionals from the communities who act as teaching assistants in the radio school centers. They and the students prepare and submit program material recorded on cassettes to the radio station, where it is edited and broadcast in two weekly half-hour programs, "Farmers' Message."

We set out with the premise that one of the weak links in most radio schools is the lack of adequate means to assure direct feedback from, and two way participation by, the student-listeners. Available materials on radio schools and radio literacy programs mention little innovation in this area. Letters are generally relied on as the only regular means of student-listener expression. There have been a few attempts to record rural discussions and opinions (notably in Niger and India as we shall describe later), but the recording was planned and structured by people from outside the area, and was not part of a radio school program.

Our intent was to provide the cassette recorders as a tool for the auxiliares, to be used by them in or outside

of the classes, and to be kept in their possession and under their responsibility. Training was to be kept to a minimum, since the recorders are basically very simple to operate. We were interested in what the auxiliares would decide to do with the recorders, so we wanted to leave them feeling free to use them in any way that seemed to them a good idea. We hoped that (1) producing programs which would be heard on the air would lead to a detectable increase in self-esteem and feelings of efficacy among the students; (2) that the possibility of exchanging information about community development-oriented activities would give more impetus to that important goal of the Tabacundo program; and (3) we mentioned, with trepidation, that the recorders might be linked with improved class performance and a decreased dropout rate. Those hopes seem to have been at least partially borne out by early results.

Participants in the classes have been generally delighted to hear their own voices and ideas, both as played back in their own small group and as broadcast in the new "Mensaje Campesino" program. They mention as their favorite part of the program the information on what is happening in other communities, and advice on cultivation of vegetables. A new first-cycle text, "Let's Cultivate Vegetables," written by the director of the Tabacundo program, has stirred up considerable interest in this topic.

He plans to use "Campesino Message" material as the basis for a second cycle text, "Community Life," to be produced in 1973-74. The classes themselves are often recorded, both for review purposes and for use by late-comers. One unanticipated result of using the recorders has been the formation in many radio school communities of musical groups, whose offerings are then broadcast on Radio Mensaje. The UMass coordinator, himself an Ecuadorian campesino, credits the recorders with aiding in the recrudescence of indigenous music, a form which was fast disappearing in the face of popular music from commercial stations.

#### Initiation of the Program

The UMass decision to work with the Tabacundo radio school program was taken more or less opportunistically. There are three radio school programs in Ecuador. The director of the Chimborazo program, the country's largest, was not interested in any contact with American institutions. Another is located in Sucua, in the Amazon jungle region of Ecuador. We did not consider it a serious possibility since difficulty of access would be a major block; also, it serves only Shuara Indians, who comprise less than one percent of the Ecuadorian population.

Radio Mensaje in Tabacundo, in addition to being the only remaining option, offered some definite advantages.

Its headquarters is a 1 1/2 hour drive from Quito; it serves a population made up completely of mountain-dwelling campesinos with characteristics very similar to about one third the population of Ecuador; and the program is small enough to work with easily, consisting at present of about 50 centers and some 1000 students in a fairly accessible area. When contacted by the UMass survey team in March, 1971 the energetic Ecuadorian director of Radio Mensaje, Padre Isaias Barriga, was open to working with the University.

The radio schools of Tabacundo are set up on the Colombian Radio Sutatenza model, and are linked with that program in many ways. Two or more auxiliares are chosen each year to attend training sessions in Colombia, and Sutatenza materials and programming suggestions are received and used regularly.

The auxiliares come from the communities in which the radio centers are located. They are unpaid. There is no certification requirement: some of the auxiliares have never been inside a regular school, having received all their education through the radio schools. They are generally young, ranging in age from about 15 to 30 years. The majority are males, but about 1/4 are female.

Program Goals

Radio school experts generally recognize feedback as important, and a UNESCO questionnaire circulated to member nations and compiled into a report in 1971 found it encouraging that this essential process of feedback seems to be carried out on the whole seriously and conscientiously, and the results analysed and used in preparing future programmes."<sup>1</sup>

We felt that there was still greater potential utility for the feedback process than had previously been made use of by radio schools. Not only could the results of letters, questionnaires and surveys be used as material for executive decision-making, but the feedback process itself could and should have a larger effect on participants than is generally the case. The UMass team proposed to Padre Barriga that free use of tape recorders by radio school participants might produce three effects:

Heightened feelings of  
self-worth and efficacy

A report written by AID<sup>2</sup> describing a successful radio school program in Honduras credited much of its progress

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<sup>1</sup>John Maddison, "Radio and Television in Literacy" (paper, Paris: UNESCO, 1971), p. 30.

<sup>2</sup>E. P. Astle, "Adult Education by Radio in Honduras" (Tegucigalpa: USAID, March 25, 1969). (Mimeographed.)

to the feeling participants had of "being part of an awakening group." This "groupness" is as important as the initial sense of individual accomplishment and the harnessing of unused capability that comes with learning to read. Awareness of the similar experiences of other people and centers in Honduras was undergirded by training sessions and monthly meetings of the monitors or auxiliares. The report links these factors closely with a growth in "confidence, concern, and group awareness."

We have possibly oversimplified the case by lumping these changed attitudes and behaviors under the efficacy label, but we can talk about that later. What we essentially surmised was that heightened group awareness is important to a growing sense of confidence. By increasing, therefore, the potential cross-fertilization and reinforcement provided by increased inter-village communication, we felt that at least possibly confidence and a sense of efficacy would also grow.

Increased community  
development-related knowledge

This was not as risky a prediction as the first, and Padre Barriga had no difficulty in accepting the probability that if radio schools reported on development projects in their communities, other radio schools would listen--and possibly with more real interest than they had previously

shown in programs on community development (which we shall abbreviate hereafter as "CD").

A study done by CEMA in 1971 for Catholic Relief Services of Ecuador, OXFAM, and AID had concluded that although community development was given considerable emphasis by the station, the programs had an insignificant impact on radio listeners. Monitors, however, were well informed. The report suggested that monitors might encourage discussions of community development problems, and that broadcasts might be combined with campaigns conducted by other means, such as group meetings and visits by CD specialists.<sup>3</sup>

Theoretical support for this suggestion comes from Everett Rogers. He acknowledges the effectiveness of mass media in producing less complex behavioral changes, like buying a different brand of soap, but stresses the much greater effectiveness of a combination of mass media with interpersonal means for (a) transmitting knowledge, and (b) persuading people toward change.<sup>4</sup>

Our belief was that cassette tape recorders could serve

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<sup>3</sup> Esteban Vega, "Evaluation of the Radio Schools Program for Basic Literacy in Tabacundo, Province of Pichincha, Ecuador" (Quito: Centro de Motivación y Asesoría, December, 1971), pp. 46-47. (Mimeographed.)

<sup>4</sup> Everett Rogers and Floyd Shoemaker, Communication of Innovations: A Cross-Cultural Approach (New York: The Free Press, 1971), pp. 159, 252.



to combine mass media with interpersonal communication, if the radio school participants were given the opportunity to tape whatever they wanted to submit as material for a program compiled from their cassettes--and not just a one-shot program, but a regularly scheduled series. The programs, we hoped, would be seen by the participants as a way of talking to each other, and of learning what was happening in other communities without having to rely on reports from the auxiliare. We looked for a growing interest in CD accomplishments, leading to a knowledge of the possibilities that is the necessary precursor to action.

Growth in CD awareness was also undeniably aided in 1972-73 by the use of the above mentioned text, "Let's Cultivate Vegetables." It proved very popular with first-cycle students, and provided a basis for much of the material submitted on cassettes to the station.

#### Better classroom performance

Our most softly-spoken hope was that use of the tape recorders would help students' classroom performance, by providing for participants the opportunity to hear themselves and through use of the recorder as a way to review the material presented in radio classes. It often appears to an observer that there is a disturbingly inexorable quality to the radio school format. Questions from

participants often come at inconvenient times, and the radio teacher's voice is ignored while the auxiliary explains what the student has missed. If the recorders were used to pick up what was missed during the classes, there could be some observable improvement in classroom and test performance.

As a corollary to performance, we thought that the excitement engendered by the recorders might mean a lowered dropout rate. This was a somewhat unlikely hope however, for the majority of those who quit coming to classes in February, March, April and May seem to be adults who leave the area to obtain temporary work in the cities. One of the major motivations for this exodus is the need to earn money for the important church festival of St. Peter and St. Paul in June.

#### Characteristics of the area

Radio Mensaje serves a basically rural population in the mountains north of Quito. Eighty-five per cent of the population are farmers. According to government statistics, about half of them are illiterate. Radio Mensaje calculates that there are about 42,000 adult illiterates in their listening area, some 3% of whom have taken part in some organized educational activity such as adult education or the radio school program.

Three quarters of the people in the Radio Mensaje listening area speak only Spanish; 20% speak both Spanish and Quechua, and 5% speak only Quechua. Poverty is widespread. Those who earn a wage take home between 65 and 80 cents a day, and they are the fortunate. No one knows the un- and underemployment rate in rural Ecuador, but the figures would not be heartening. Many adult males have to seek temporary work every year for a few months in the cities, carrying sacks of cement or ladies' packages as cargadores, or if they have a skill they seek work on one of the many multi-story offices and apartments being constructed in Quito's building boom.

The scenery is magnificent, with snow-covered Andean peaks all around, and cultivated patchworks climbing their slopes. The people live at altitude ranging from 9,000 to 11,000 feet. The temperature drops quickly when the rains come, and when the sun goes down.

Tabacundo is a small town with mud walls and cobblestone streets. The radio studio is in a large pink building next to the church on the main square. It is always chilly inside; the radio school director almost never takes off his car coat in the cold season.

#### Planning

Planning of the project was governed by our

determination to preserve a non-directive stance regarding use of the recorders. There was some early sentiment for using them as a vehicle for programmed instruction in important areas, distributing recorded cassettes as a supplement to the radio school curriculum. We discarded this idea, at least for the first year, in favor of making the recorders a tool of the people themselves, used exclusively for their self-expression. That way we would test whether campesinos are capable of using such a tool with imagination and effectiveness. The decision to let the auxiliares have maximum flexibility in deciding how to use the recorders seemed to be a logical conclusion of similar experiments which had been undertaken in other countries. If the auxiliares proved unable to figure out how to use the recorders to good advantage, there would be time later to introduce programmed materials and the like--that is an area in which considerably more work has been done. Encouraging maximum flexibility would provide in a sense an experience with one end of the spectrum of possibilities. Later, experiments could be planned which would limit to some extent the auxiliares' latitude of operations, if that seemed desirable.

There were also other points to consider: (1) how much training would be required; (2) what kind of batteries should be used, and where would the money come from to buy

them; (3) how many cassettes should be distributed with each recorder; (4) how would the cassettes be distributed and collected; (5) should the material be broadcast as received, or should it be edited into a program combining recordings from various centers; (6) who would be in charge of program preparation; and (7) how much time, and during what hours, should the material be broadcast?

We decided to provide only minimal training, since the cassette recorders are extremely simple to operate, and all the auxiliaries could be safely assumed to be accustomed to operating a radio, which is more complicated. The training was to consist of a two-hour "hands-on" laboratory, with auxiliaries interviewing each other and playing the results back to the assembled group.

The support staff at the university did a short investigation of the possibilities for using cadmium batteries instead of regular flashlight batteries, to see if the considerably greater cost would be justified by longer life. It was decided however, that for reasons of cost and convenience, regular "C" cells available in Ecuador would be used. Four hundred dollars was to be made available from USAID--intended originally to pay the salary of an editor, but quickly seen to be necessary for the purchase of batteries. We had originally thought that the people themselves could be responsible for supplying replacement

batteries, but the crushing poverty of the region and the fairly rapid consumption rate made it necessary for Padre Barriga to provide replacements. This he did from Radio Mensaje funds, which were then reimbursed from the UMass project budget.

In the beginning we decided to have two cassettes available for each recorder, the idea being that the blank cassette could be exchanged for the recorded cassette by the auxiliar whenever he had a full cassette to turn in to the station. Extras were also available, since it was planned to keep the programs on file. The cassettes were to be distributed and collected in three ways: at the regular monthly meetings of the auxiliares, by the three area auxiliare supervisors, and by mail.

Padre Barriga's initial idea was to broadcast the material exactly as he received it in order to avoid any problem of bias in editing. However, he changed his mind before the project began. It was clear that if all the auxiliares sent in one cassette every week, or even every two weeks, there could be from 19 to 38 hours of material per week for broadcasting. This was clearly impossible, so the necessity of editing was evident. He decided to hire a part-time assistant to help with program preparation.

A decision about broadcast times was left to later, since it was contingent upon the amount of material received,

and at the outset no one was able to say what the auxiliaries would produce.

#### Research Plan

Four means were to be used to ascertain whether the recorders were having any effect on the radio school program.

To determine whether there was any change in dropout rate and classroom performance, the simplest means was to rely on available data concerning attendance, "desertion," and performance on the Ministry of Education test at the end of the year. This information was collected each year by the radio school program, and would be made available to the UMass staff by Padre Barriga.

Second, it was decided to repeat an extensive questionnaire devised and administered originally by another AID contractor, Hayes Keeler. The questionnaire covered not only performance on reading, writing, and math tests, but also feelings of self-worth and efficacy, knowledge of community development information, and development-oriented behavior. It had originally been administered in March, 1971. We decided to repeat it in March, 1972, before the recorders arrived in Ecuador, and again in March, 1973, when the recorders would have been in use for about six months. The results were to show whether there was any noticeable change in the students before the recorders

Longitudinal Development

Training was held in early October, during the auxiliares' regular one-week training session just before the beginning of the school year. Total training time was about four hours, although during the rest of the week the auxiliares did continue to use the recorders for interviews among themselves.

The training was a "hands-on" laboratory session, with the recorders placed in the auxiliares' hands immediately as they were taken from the packing boxes. Patricio Barriga, UMass project director, gave a short demonstration and the auxiliares then began to interview each other. These interviews were played back for the entire group and comments were invited. There was almost no technical difficulty from the outset. The Craig recorder used in the experiment has a unitary control, i.e., one lever is moved right, left, or down to advance, reverse or play. This simplicity is partly responsible for the auxiliares' rapid mastery of the machine.

During the afternoon the auxiliares brainstormed possible ways in which the recorders could be used. The UMass staff did not recommend or require any particular use, and Padre Barriga promised that the station would be interested in whatever was produced. The auxiliares generated numerous suggestions and seemed eager to begin.



Results did not come in immediately however, as the pickup and exchange of the cassettes proved to be slightly more difficult than had been imagined. Padre Barriga waited until the initial meeting of the auxiliares in early November to pick up the first recordings, and the first program was broadcast on the weekend of November 11. In the meeting with the auxiliares, the group decided that the best action would be to produce a half-hour program for airing on Saturdays at 5:00 p.m., with a repeat on Sundays at the same hour, because farmers were likely to be free to listen at one of those times.

The first program consisted of comments about the radio schools, together with a little music produced by a group from one of the communities. The commentaries were elicited from a number of centers, as well as from a group of 18 seminary students who were working in some of the radio school communities. The general tone was as might be expected, rather solemn and self-conscious. A seminarian:

I want to work with campesinos on both a cultural and religious plane, to help them advance. I plan to acquire a greater experience in order to be more effective as a country priest when I return to my province.

The auxiliar in the center at Chavezpamba:

We want to send our best greetings to Padre Isaias Barriga, to our dear teachers in the radio school, and to our fellow students in the province of Pichincha, as we begin this new course.

Everyone is very interested in the recorders, although they're a little afraid of talking. However we hope that little by little we'll be able to adapt to this new idea. As yet, it's a little strange.

All of the students interviewed professed their great happiness at being in the radio school, and their assurance that this would be the best year yet.

In addition to examining the first program the writer randomly selected one of the weekly programs from each of the months from November, 1972 through February, 1973, for an informal analysis.

November 25: By the third program, there was more content of a community development nature. The community of Ucschaloma, high on the mountain behind the town of Tabacundo, recorded a meeting in which they decided to get together the following Saturday for a "minga," or community work project. They were in the process of upgrading their living conditions, having formed a coop and by means of a group effort, building a new house for each of the members. Having recorded this meeting, they followed through and recorded the sounds of work when the minga took place. One heard hammers behind the voices of the workers as they discussed their progress and needs.

December 30: This program consisted entirely of a "Christmas Special" put together by the auxiliar and students of the center at Cananvalle. The auxiliar, a

campesino farmer, preached; the students read from scripture, and gave greetings to their fellow students in the other radio schools.

January 20: This program began with a recording of the January general meeting of auxiliares. They did not discuss the recorders specifically, but there was a unanimous request for more programming time, possibly just before the beginning of classes. This was acted on in February with a Monday repeat of the regular Sunday program presented at 4:30 p.m., just before the start of class.

Another effect of the recorders was obvious in the January 20 program. Musical groups presented songs in Quechua, with participation of women; members of the Simon Bolivar school read original poems, and yet another school, Cochabamba, presented music especially prepared for the Mensaje Campesino program. The songs in Quechua may reflect some elements of "Indian is Beautiful" thinking, although it is too early at this writing to state that with any certainty.

February 24: Indian power was mentioned in this program, as it opened with an auxiliary interviewing the president of the new National Indigenous Movement, Jose Antonio Quinde. Quinde described the organization's aims and progress to date, including a series of meetings to learn whether it was seen as useful by the indigenous population.

More Quechua music followed, and a new element: new

readers practiced reading pages from the text, "Cultivemos Hortalizas," providing a possibly comforting standard of comparison for the other hundreds of students for whom reading aloud is still a painful experience.

To summarize the programs, it seems that music will continue to be an important part of the content, and that community development emphasis is also substantial. The students seem to have a strong sense of participation, and fear of the recorders was not mentioned after the first program. There seems to be a considerable capacity for innovation in the use of the recorders as well. Padre Barriga tells the story of a group who convinced an engineer from the Hydraulic Resources Ministry to be interviewed for the Mensaje Campesino program. His answers to their questions about the possibilities and difficulties in obtaining running water provided valuable information to members of other centers.

Some communities have begun to produce and record sociodramas. Taking different roles, they enact and discuss problem situations, which are then shared with other communities by means of the radio.

One community used the recorder as a way to guarantee that what they were being told by an official from another development program would not be forgotten. The recorder was kept hidden under a poncho until the meeting (which was

apparently filled with promises of imminent action) was over; they then brought it out and played back the tape demonstrating to the official that his words had fallen on sensitive plastic as well as on eager ears. His reaction was not recorded.

A variety of procedures are employed to distribute and collect the cassettes. Mail service has not proved satisfactory because it is too unreliable. Personal delivery service is provided by (1) the supervisors of the three areas; (2) young priests who are working in the area and cooperating with the Radio Mensaje program; and (3) through exchange of cassettes at monthly auxiliary meetings.

#### A Tape's Progress

Blank tapes are provided to the auxiliares, whose responsibility is to get them back to the station in Tabacundo as soon as they have some material they wish to be used on "Mensaje Campesino." Once a tape is received in the station it is reviewed by Padre Barriga and occasionally by an assistant. They use two cassette recorders to edit the material and compile a half-hour program each week. The program cassette is saved, and the other cassettes are sent back to the communities.

The programming has been expanded since the beginning. At first a half-hour program was made and played both

Saturday and Sunday. After the first couple of months Padre Barriga decided to produce different programs for the two days. Then following the meeting of auxiliares mentioned above the station began to rebroadcast the Sunday program on Monday afternoons at 4:30, just before the beginning of the first cycle class. Short segments of campesino music have been introduced between classes on weekday afternoons.

### Results

#### Cost

The initial unit cost of the recorders was about \$35, so the 38 recorders provided to the radio schools cost a total of about \$1330, or about \$1.30 per student. There are of course other listeners in the area, but there are no figures available on how many listen to "Mensaje Campesino."

Cassettes were purchased in the United States at about \$1 each. These 60 minute tapes were alleged to be the best quality available. The cost in Ecuador is much higher, about \$4 to \$6. One hundred and twenty cassettes were provided at the beginning of the program, and another 20 were added in March, 1973. This number seems to have been barely sufficient. Delays in retrieving cassettes from auxiliares made it desirable that they have more than one cassette at a time.

Training costs were minimal, since as noted above, the

recorder training was combined with regular pre-school auxiliary meetings. Two UMass staff members participated in the four-hour training.

Maintenance costs have not been high. Four of the recorders arrived damaged, and were sent back for repairs. One or two others developed trouble with the recording heads during use. An engineer friend of Padre Barriga's has been able to fix small problems and overall nearly all of the recorders are in use almost all of the time. One year after the project began, all but about six of the recorders were still operative. Not one of the original cassettes has given any trouble.

Editing time has amounted to about one afternoon per week. Collection of the cassettes is difficult to describe in terms of man-days, because it is shared by a number of individuals, but it is combined with their regular visits and work, so the incremental time required is not substantial. As was mentioned above, batteries are also bought by the project.

The total cost of batteries, repairs, and distribution during the first six months of the project was about \$300.

There seems to be considerable potential for stretching the application of the recorders as the number of radio school centers grows--using them for a couple of weeks in one center, and then switching to another. The crucial

variable would seem to be the need to assure enough time in each place so that the auxiliar has a change to feel comfortable with the machine, and to think of possibilities for its use. Perhaps such an approach would be a more efficient manner in which to use the recorders, since the auxiliares would feel more pressure to make use of their allotted time. One recorder could not unreasonably serve three or even four centers, each having access to the recorder for two weeks every two months.

#### Preliminary Research Results

As was mentioned earlier, a complete synopsis of evaluation results will be presented in a technical note in late 1973. At this writing some preliminary results can be shared.

Performance on the Keeler questionnaire was noticeably higher in 1973 than in 1972. The composition of the classes changed as well, the 1973 group being generally older, and more predominately male than in 1972. Padre Barriga attributes these changes in large part to the use of "Cultivemos Hortalizas," with its emphasis on knowledge of utility to farmers, but he feels that the recorders also played a part.

Reading, writing, comprehension, and awareness scores were all up in 1973. Attitudes changed toward increased



risk preference and discontent with present levels of earnings and production.

Thirty-seven of the 49 radio school participants interviewed in 1973 had taken part in recordings, and all but one of these said they had heard their own recorded voice. Thirty-one had listened to "Mensaje Campesino," and 11 of those stated that the program had had some influence in their community, especially in terms of agricultural improvements. Twenty-four uses for the recorders were volunteered by the participants, with musical recordings the most mentioned, but also including "to listen and learn," "to learn to express one's self better," "to record meetings," and so on.

#### Feasibility

It is clear that the campesino students in the radio schools would never be able to buy recorders and cassettes on their own (although facilitators in two communities who borrowed recorders from UMass bought their own shortly afterward for about \$40 each). That the station would be able to take care of maintenance and operation costs would seem more likely--Padre Barriga actually paid all of those costs during the year, although with a view to recovering at least part of them from the UMass project.

From the perspective of an international organization

(which of course was the source of original funding and continuing support for the Radio Mensaje operation), the project is not costly. Much depends on the perceived utility of the recorders to the students and auxiliares. Their responses so far have been very positive. It remains to be seen whether this is just "novelty effect" or whether it will last. For this reason and also to see whether the recorders will last physically it is impossible to make any definitive statements on feasibility at this time. What can be said is that if the use of recorders makes any substantial difference in radio schools and in the achievement of their stated development goals, it is very likely that money would be available from international sources.

#### Complementarity

There are early indications that the recorders will serve for more than recording material for the "Mensaje Campesino" program. The examples of the campesinos who interviewed the engineer and those who hid the recorder under a poncho are illustrations of complementarity. Campesino leaders have also been using the recorders to bring recorded statements of people in the community to bolster their case with development agency officials. They also record meetings and use the playback time to understand better where they are and what they want to do.

## Staying Power

It is too early yet to state whether the recorder project will have staying power. As mentioned in the above section, it could be riding during the first year on the newness of the idea. There are however, at least two indications that the idea is growing in acceptance as time passes.

First, the amount and variety of material being submitted to the station seems to be on an upward curve. The auxiliaries are thinking of new ideas for using the recorders, and there is some element of mutual stimulation and reinforcement (witness the growth of musical groups in the communities). This would be a definite plus for the staying power of the project.

Second, Padre Barriga's enthusiasm has grown during the year. His first impression was that the recorders would serve for little more than information exchange, but after the first few months he sees them as a tool for increased self-awareness and self-esteem--in short, he views the recorders as accomplishing at least in part what they were intended to do.

The recorders seem to also have been integrated into the regular radio school program in ways such as the following:

1. Recorders are used to inform late-comers of what has happened in the class prior to their arrival.
2. Recorders provide pronunciation practice. One of the most frequent comments from participants was that hearing themselves on tape showed them how different their pronunciation was from what they had imagined. They talk, of course, like campesinos. Their aspirations here are probably modeled on Padre Barriga as well as on commercial radio announcers.
3. Recorders also serve as a review device--the class, or those who feel the need, can hear the lesson as many times as they wish. There is some indication that this idea is fairly common among the centers.

There is a trend toward family centered radio schools, to make participation easier by cutting down the distance participants have to walk. At present, most of the centers involve neighbors, and thus provide an opportunity for conversation and exchange of ideas. With the growing number of family schools, in which one member will serve as auxiliary, the opportunities for social intercourse will be reduced. The potential gap might be filled in part by recorded interchanges. Thus, an increasing number of family schools would probably be accompanied by an increasing emphasis on recorders, with each family having, as mentioned above, occasional access for recording purposes

The recorder program has been continued into the 1973-74 school year. About ten new centers will open in 1973-74, a development which Padre Barriga relates in part to the presence of the recorded programs as an attraction. One of the centers is even calling itself a "radio

community," because the participants aspire to it being much more than just a school.

### Lessons

Basically, early results seem to bear out the project's original conviction that campesinos have something to say, and are willing to listen to each other. They are inventive enough to produce material on their own. It also seems that people who are listened to feel better about themselves. Whether the recorders aid in literacy remains to be seen.

#### Positive Lessons

One basic assumption of the project which seems to be borne out is that people are interested in something which is their own creation, or even the creation of people whom they know as neighbors. This is certainly one of the strong reasons for which the program has attracted a high percentage of radio school participants as listeners.

Padre Barriga sees two major effects of the tape recorders:

First, they demonstrate the "power of the word." A campesino's voice expressing his thoughts has much more impact than a letter read in a cultured announcer's tones. "Even if the announcer attempts to read with a campesino accent," says Padre Barriga, "it only sounds as if he's

trying to make a joke of it."

Second, direct expression gives voice to something he calls the "mystique of the campo." Although difficult to pin down, it connotes active interest in country life, with goals and satisfactions different from those of the city--something like what was expressed by the participants in the Guasaso course.

Whatever the concepts, by the autumn of 1973 "Mensaje Campesino" was the most listened-to program on Radio Mensaje, although it was in a close race with an evening music program.

The recorders provide prestige for the unpaid *auxiliares*, acting as a kind of salary substitute--but there is no way the recorder can create prestige for either the *auxiliar* or for the community without group participation. There is still the problem of *auxiliares* keeping the recorder in their house and using it to listen to music, but since the community is aware of its existence and its intended purpose, there is continuing pressure to keep it active.

The variety of uses to which the recorder can be put is another advantage. Some of these have been mentioned above, such as recording the proceedings of meetings, classes, giving a sense of place and importance to group work, *mingas*, and so on, giving voice to indigenous music,

and for recording locally-produced sociodramas.

Having Radio Mensaje as a built-in outlet for the recording is also a crucial factor. Research shows the combination of interpersonal and mass media communication to be effective in achieving change and the adoption of innovations. The fact that the station is interested in the material and airs it fairly promptly serves as a continuing reinforcement for what amounts to a kind of interpersonal contact heretofore impossible. It also seems reasonable to assume that it stimulates a sort of competition among centers to share advancements and accomplishments.

#### Not-so-Positive Lessons

The reliability of the recorders is still an open question. Since the recorders are still a fairly scarce item in Ecuador, local repairs are problematic, although this situation should be changing for the better. The sound heads are a delicate item, especially with regard to dust, but are not costly, and can be replaced by Padre Barriga's engineer friend. The auxiliares are very cognizant of the need for care, and keep the recorders in plastic bags. Generally, the results are quite favorable, thanks in large part to the care taken by the auxiliares.

Batteries are a continuing cost, which for the near future will have to be borne by the project. According to

a recent survey by Radio Mensaje, only 35% of Radio Mensaje students have their own radio, compared with 81% of the population in richer areas of the province outside of the radio school zone. This is an indication of the relative poverty of the zone, and of the difficulty villagers would have in carrying responsibility for batteries and maintenance (although some auxiliares have been replacing batteries themselves).

#### Possible Improvements

More sharing among centers of tapes and information should be a reasonable easy goal to achieve. With extra cassettes, communities could initiate horizontal communication when they have special interests in common. Contact among auxiliares at their regular meetings could be a way to facilitate this adaptation.

Another possible change is in programming time. One suggestion now being implemented is to use short items between classes, i.e., when first cycle is leaving and second cycle people are arriving. This five to ten minute period is now filled with campesino music. If the 4:30 p.m. Monday time slot is popular, the programs may be broadcast more often during the week.



## Comparisons

The idea of taped feedback has been tried in the Radio Clubs of Niger<sup>6</sup> since 1962, although it is not linked with a radio school program. The clubs were designed as local units of radio production centered around economic and social development. A national-level staff plans the broadcasts, selects program themes, drafts discussion guides, and produces broadcast tapes. They train club leaders for two weeks annually and provide continuing support. The programs arouse considerable interest, even at high levels of government, since they are a ground-level expression of opinion.

Other countries have tried to initiate two-way radio as well. Congo (Brazzaville) has studied the possibility of a program similar to that in Niger. India's Farmer Discussion Groups are well known, and emphasize feedback of discussion results.

To our knowledge, however, no program has previously tried to provide such latitude of expression with a minimum of structure. We may be too far out on the limb, but results to date make the "power of the word" seem worth cultivating.

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<sup>6</sup> Robert Lefranc, "Radio Clubs in Niger," in New Educational Media in Action: Case Studies for Planners (Paris: UNESCO, 1967), pp. 61-78.

## CHAPTER VIII

### EVALUATION: PROMISES TO KEEP

Our evaluation plan called for several ways of measuring whether we were keeping the promises we'd made in our proposal. We had obliged ourselves to produce materials which were low-cost and required little training, which would be interesting enough to be used over and over again, and which would be part of a process of invention rather than an end product. We were further committed to working directly with several organizations, supposing that they would be interested enough to want to make use of our ideas; and to making the materials available to other groups who expressed interest. We needed measures of accomplishment in these areas to tell us (and enable us to tell others) whether we were achieving what we'd promised to do.

There is no easy answer to the question of how to evaluate a project which is attempting to break new ground. Our position has been that initially it is necessary to look at variables in gross terms-- (Does anything happen? Does it look at all like what we'd hoped for?)--and to be ready to allow for, see, and note serendipitous results.

Later, when it is clearer what general results can be

reasonably expected to look like, is the time to use more traditional research techniques in checking finer points. This early concentration on easily observed behavioral changes also avoids the self-consciousness engendered in research-naive populations by the employment of strict (and obvious) experimental design and controls. We found it a useful approach to let people choose which of our ideas they wanted to use and how they wanted to use them. In fact it is basic to our notion of nonformal education that the ideas be flexible enough to be used by a variety of persons in different ways.

The above evaluation procedure corresponds roughly to Ted Ward's "descriptive" phase of a "formative" evaluation.<sup>1</sup> That is to say our efforts during the first phase have been primarily concentrated on description of actions and changes, leaving the trickier tasks of measurement and assessment to a later time. Meanwhile we have made a tentative value judgment that the changes we have observed are interesting and promising enough to warrant pressing on and trying to improve what we're doing.

A substantial part of our evaluation results have already been reported in preceding chapters in descriptions of radio program contents in chapter seven, community

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<sup>1</sup>Ted Ward, "The Why and How of Evaluation in Non-formal Education," Institute for International Studies in Education, Michigan State University, August, 1973. (Mimeographed.)

development results in the various communities of chapters five and six, ways in which the Hacienda game was used, and so on. This chapter's task is to summarize what we have done in the way of measurement, so emphasis is on costs, correlations, and quantification in general. The reader should remind himself that this chapter is only part of the evaluation picture, and not necessarily the most important part at that.

This chapter will summarize several measures:

- |                       |  |
|-----------------------|--|
| Cost Analysis:        | Computations of development, production and training costs.  |
| Use of the Materials: | a) by groups with whom we worked directly<br>b) by outsiders (the "spread effect")                               |
| Measures of Learning: | a) Comprehensive Achievement Monitoring for math<br>b) lab evaluation of fluency games<br>c) facilitator project |

#### Cost Analysis

##### Development Costs

One natural question is "How much time and money did you people spend on producing those ideas?" This is an effort at assigning cost figures to materials development. It is a tricky business at best, but the reader familiar with costing procedures should see the following as a fair attempt.

There were three ways in which we spent money and time

on material development: staff salaries, consultant fees, and materials. To these must be added part of the university overhead. To avoid underestimation of these costs, we have

1. Charged the Material Development specialist's salary for the entire year, although most materials were developed by June. Cost, \$4500.
2. Charged all US consultant expenses through the end of the spring semester, since the temporary assistants were paid from this fund. Cost \$2396.51.
3. Charged a portion of Quito staff time. The director, Patricio Barriga, spent a month in Amherst, other staff members spent about a week each working out new game ideas. Cost, \$1000.
4. Charged half of the Materials Budget for the year to game development. Cost \$1500.
5. Charged overhead at the university rate: 46% of salaries paid in the US; 16% of salaries paid overseas. Cost, \$2230.

Total development cost: \$11,626.51.

It is difficult to say exactly how many techniques have been developed. The invention process is ongoing--it did not end at a specific cutoff date--and some of the ideas are adaptations of others. We can conservatively say that 25 techniques have been developed, giving us a development cost per technique of about \$465. There is no easy way to say whether this cost is to be crowed over or apologized for, since the games are not clearly comparable to textbooks or other teaching devices, but the strategy did provide us with a bonanza of ideas--far more than we could immediately

test and use.

Direct out-of-pocket development costs were much lower than \$465, of course. As mentioned earlier, we paid at the university \$25 for a germ idea, \$50 for a semi-finished product, and \$75 for a usable technique. In Ecuador we paid \$25 for an idea as well, but since testing opportunities were easily available, we only accepted for payment ideas which had already been tried out with campesinos.

#### Production Costs

Below are some examples of costs incurred in the actual production of games. Those labeled "in-house" were produced in the UMass office by the project messenger; the "adult education" costs were paid to the head of the Los Rios provincial adult education program who produced 50 copies of several games for the use of teachers under his jurisdiction; "contracted-out" costs were incurred in the printing of 500 copies of two games by a commercial firm in Quito and in various personal contracts with carpenters, etc.. Some games were produced in two of these ways.

This gives some idea of the range of costs<sup>2</sup> (although the cheapest game, number dice, costs only 6 cents). Some

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<sup>2</sup>Some games were produced by the people who used them; i.e., sometimes they made extra copies, or adapted the ideas to their own needs and then cranked out copies of the new version. We have no cost figures on those efforts, since the project was not directly involved.

TABLE 1

Game	In-House	Adult Education	Contracted Out
Letter Dice* (11 wooden blocks)	30 cents	12 cents	-
Letter Rummy (66 cards)	19 cents	-	35 cents
Market (127 cards)	60 cents (probable cost; we have not made game by hand)	-	84 cents
Addition Bingo (19 game cards, 78 problem cards)	-	38 cents	\$1.85
Hacienda	\$4.00	-	-
Math Roulette (wooden wheel, metal spinner)	-	80 cents	\$2.40

\* An example of how cost breakdowns were done follows:

Letter Dice

Material cost: 11 wooden blocks at 2.4 cents  
from local carpenter 26.4 cents

Magic markers (cost 28 cents,  
last for about 25 sets) 1.1 cents

Labor cost: Sets are made by project  
messenger, whose monthly  
salary is \$40. Each set  
takes about 6 minutes to mark 2.5 cents

Total cost 30.0 cents

games, like Hacienda, are definitely expensive. Their advantage is that they are to be played by a group, and fulfill a multiple function. Others, like math roulette, which provides practice in the same skills as other far cheaper games, would have to elicit a strong audience loyalty to justify continued production.

To summarize: We have some techniques which are blessedly cheap. Their costs can be further reduced in at least two ways: bulk production of the most popular, and home-made copies produced by interested participants from available, virtually costless materials. Both possibilities are being tried out. How to cost-effectively distribute the materials once they are produced is the next question. UMass staff are paying more attention to that problem during the second year of the project.

#### Training Costs

One clause in the UMass contract was that we should make nonformal ideas available to interested groups and show people how to make use of them. Training was thus an integral part of our activity. We experimented with different ways of introducing materials in an attempt to get an idea of what minimal level of effort on our part would still be effective, and to learn what methods were more efficacious than others.



Four training models were employed during the year. We shall briefly describe them and provide cost figures for each.

A. Short-term training by UMass staff: This model was used with each of the direct institutional involvements, that is, with the facilitator follow-up, SEV volunteers, Cachisagua leaders, adult education teachers, and the Radio Mensaje auxiliares.

UMass staff led the training in a fairly traditional manner. A conscious effort was made to hold down costs by using facilities in the campo instead of in Quito and by keeping the sessions as short as possible.

SEV training costs (25 participants, 4 days)

UMass salaries	\$165.
UMass per diem	64.
UMass transportation	36.
Meeting space (adult ed center provided without charge; estimated opportunity cost)	20.
Food	125.
Transportation of participants	50.40
Opportunity costs for participants, based on volunteer salaries	<u>400.</u>

Total \$860.40

Cost per participant-day \$ 8.60

Using the same calculation process, costs for the other courses were:

		Cost per Participant-Day
Cachisagua (15 participants, 4 days)	\$ 387.40	\$6.45
Facilitator follow-up (23 participants, 4 days)	402.	4.60
Adult Education teachers (42 participants, 5 days)	1038.10	4.95
Radio Mensaje auxiliares (40 participants, 1 day)	152.	3.80
	Average cost per participant-day	\$5.43

One can say the training sessions were on the whole quite cost-effective, if effectiveness is measured in terms of the length of time participants actively used the techniques upon returning home. No hard-and-fast figures are available, but some educated guesses follow:

- SEV Volunteers:** About half the volunteers continued to use some of the ideas during the following year. Say 12 persons, or nearly six months average use of the ideas per course participants.
- Cachisagua:** Not so great. Four people continued to use the ideas regularly, for a course average of something less than three months.
- Facilitators:** All facilitators continued using the materials for five months, after which about 15 continued for the rest of the year, for an average of about ten months.
- Adult Education:** Only five of the participants were expected to use the materials regularly, and they did. Of the others, all who attended the end-of-year teachers' meeting said they had used the dialog method, and several had used games as

well. Best guess: Half had made significant use of the ideas, say a three month average.

Radio Mensaje: All the recorders were used during the year, so the average is twelve months.

Using the above data, fragile as it is, we see that for an investment from \$18.40 to \$34.40 per person,\* the techniques were used an average of about seven months. Tentative conclusions: the techniques are largely self-motivating, need little training investment. Catch comes in that another desideratum is behavior change, e.g., we hope teachers will begin to behave differently toward their students. For that the nonformal techniques should help, but more training and modeling behavior will be needed.

B. Campeños training campeños: This is the model of chapter six, in which facilitators from the original villages spent one to four months in intensive preparation and recruitment. They received no compensation for that preliminary activity, being paid rather as consultants for the duration of the ten-day course. It was clear to both the facilitator organizers and to UMass staff, however, that the \$4 per day they received covered their period of

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\* Not counting the Radio Mensaje group, who were introduced only to the care and operation of cassette tape recorders, which cost only \$3.80 per person. Variations in the other costs do not reflect different intensities of effort so much as extraneous peculiarities of individual situations. The only major departure was that the Adult Education teachers received per diem instead of eating together at a conference dining table.

preparation, since it is eight to ten times the regular daily campo wage. The "consulting" idea was mentioned in chapter six.

The Tutupala course (16 participants, 10 days), excluding the salaries and expenses of UMass observers who took no direct part in the training, but including all other costs in the above SEV cost analysis, cost about \$480, or \$3 per participant-day. Guasaso (11 participants, ten days, but only eight finishing the course) cost about \$340, or \$4.25 per finisher-day.

C. Office visitors: As we had anticipated, there were a number of occasions during the year when visitors came to our office to obtain information and materials for use in their own projects.<sup>3</sup> We put all our ideas at their disposal and encouraged them to use and adapt them in any way that pleased them.

Two examples will illustrate this model:

The young director of the Centro Juvenil Brethren in Quito heard of the games and came to see if there would be some possibility of using them in the center, which provides recreation and milk for some 200 children from poor barrios. We readily agreed, and over the next three months two youngsters from the center showed up from time to time, selected a game, spent a few hours making a number of copies

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<sup>3</sup>One worrisome problem area was the obvious potential of some of the techniques for commercial production and sale. We were successful during the year at discouraging those who came with that in mind. Copyright laws in Ecuador are not strong, but should be a sufficient threat to stave off entrepreneurs who would like to sell us back our own ideas, and enable us to continue our policy of free access to information.

and learning to play it. We provided the materials. A later check showed the games were being heavily used. Cost: About one man-day labor by UMass staff, materials cost about \$5.

Colegio Kennedy is an experimental secondary school and adult education center on the coast. The principal and a Peace Corps volunteer teacher visited the UMass office one afternoon and examined a number of games, taking what they liked back to the school. Several months later we dropped in and found the games in use, but in new versions which better suited their purposes. For example, Market had been changed to give tailor trainees practice in buying cloth, thread, needles, and so on; another version provided practice for carpenters in dealing with wood, nails and the like. Cost: One man-day of UMass staff time; no material cost to us other than one copy of several games.

The vignettes are illustrative of what we had hoped would happen: that our bright ideas would be appealing enough so that others would use them without drawing on our scarce staff time.

D. Non-institutional, minimal training: This model was tried in two situations: during a special visit to a community which had never seen the materials; and in connection with the evaluation labs mentioned later in this chapter.

We stopped one day in the village of Chota and spent an hour showing the games to anyone interested. A group of about 25 people collected, most of them children, and seemed enthusiastic and quick to learn. The games were left in the village. A subsequent visit, however, showed that one of the adults who had participated had taken the games to his house for "safekeeping," and no one had seen

them since. Cost: One hour UMass staff time. Benefit: Negligible. Tentative conclusion: Some threshold must be reached before ideas are effective. Probably sufficient if only one or two persons reach it, as they will involve others.

In communities where the evaluation labs were run, about 20 people learned to play two of the skill games. Copies were left in the villages. Subsequent checks showed they were being played--not in schools, but rather where people gathered on weekends and rainy afternoons--community centers, bars, and so on. Cost: No incremental cost in staff time, material cost negligible.

Summing up: Costs are low, and should go lower. Development goes more easily once a precedent is set. Much of the second year's development activity is centered on improving germ ideas from the first year. Production costs should decrease as larger numbers of the techniques are produced. AID has a production contract with a department of the Ministry of Education this year, but cost figures are not indicative of actual production costs, since the contract is also in the nature of a subsidy. As the ministry implements nonformal ideas on a national scale, cost reductions should be realized. Training costs were in large part opportunity costs, suggesting that major cost-lowering potential lies with introducing the techniques in the course

of doing something else--for example, during market day activities, when people are together and have some leisure--or as we have attempted from the outset, by piggy-backing nonformal ideas onto regular institutional programs.

#### Use of Materials

Use by "insiders": The groups with whom we worked directly used the materials extensively, although they did not either use or like all of them equally. "Market" was very popular with the Los Rios group on the coast, but was not used regularly by the sierra facilitators except in one community. Letter dice was probably the most extensively used game, but by the end of the year was rated low or at the bottom in popularity. Other games were very well liked in some communities, virtually ignored in others.

The CEMA evaluation team checked on facilitator use of games as of October, 1972. Their summary chart follows.

The facilitators used the games more intensively than perhaps any other group, but the overall situation was not dissimilar, in that SEV volunteers, adult education teachers and coop members made use of the materials on a fairly regular basis, twice a week or more, as an annex to their other activities. The materials proved compatible with a variety of educational and development programs. They served as a reward mechanism in a reform school, when

TABLE 2<sup>4</sup>  
GAME USAGE

Date of Introduction	Name	Punachizac	El Rosario	Sigualo	Tutupala	Balzayan	Guazazo	Ulpan
Nov. '71	Hacienda	x	x	x	x	-	x	-
Feb. '72	Letter Dice	x	x	x	x	x	x	x
Feb. '72	Letter Rummy	x	x	x	x	x	x	x
Mar. '72	Number Dice	x	x	x	x	x	x	x
Mar. '72	Market	x	-	-	x	-	-	-
Mar. '72	Ring Toss	x	x	x	x	x	x	x
Mar. '72	Pinball	x	x	x	x	x	x	-
Mar. '72	Bingo	x	x	x	x	x	x	-
Mar. '72	Roulette	x	x	x	x	x	x	x

x = regular usage  
- = irregular or no usage

good behavior in class was followed by a chance to use the games for ten minutes. "Hacienda" is used as a community organizing tool by several villages. "Market" helped train store assistants to give correct change, and so on. The

<sup>4</sup>Centro de Motivación y Asesonia, "Informe final del Proyecto de la Educación No Formal" (Quito, December, 1972), p. 26. (Mimeographed.)



"insiders" made creative use of the materials, showing us and others new possibilities in doing so.

Use by "outsiders": We somewhat immodestly predicted that a number of people and institutions would be interested in using the nonformal methodologies. Some were exposed to the ideas at the "show and tell" sessions, others visited our offices, and yet others were told by third parties.

Following is a partial list of those who made use of some of the ideas during the year; our information is incomplete because we encouraged free access to information for anyone involved or interested in community education and development. We're sure that others in addition to those listed have used the materials--we'll probably continue hearing from them.

Summing up: The "outsiders" are impressive for both their numbers and their diversity. For a very small investment of UMass staff time, the materials were used for family education programs, in army barracks, by student volunteers working in the campo, night school students, community educators in minority Indian tribes, and others. Since the organizations employed the games on their own initiative, one can assume they found them useful in terms of their goals. Our hope that the materials would be compatible with education and development activity in a variety of situations seems to have been borne out. With

TABLE 3  
SPREAD EFFECTS

Institution	Which Techniques	Numbers of People Involved	Estimates of Intensity of Use	UMass Effort Required
Colegio Kennedy	Market, Letter Dice, Rummy	10 (?) teachers 300 (?) students	2 nights/week during school year	Conversation one man-day
Los Rios Primary School Teachers	Rummy, Market, Chulo, Bingo, Ring Toss	10 + teachers 300 (?) students	During school year 2 times a week	None; introduced by other teachers
Instituto Linguistico de Verano	Letter Dice, Rummy, Market	35 teachers 700 (?) students	?	"show and tell" training: 3 man-days
Centro Juvenil Brethren	Dice (letter & number), Dominoes, Bingo	200 youths	every afternoon for 6 months	Game-making one man-day
Army	Roulette, Pinball, Rummy	50 (?) officers (?) soldiers	used in rec. rooms during off hours	None: trained by Mauro Jacome under separate contract

TABLE 3--Continued

Institution	Which Techniques	Numbers of People Involved	Estimates of Intensity of Use	UMass Effort Required
COLAC (Cooperative Federation of Latin America)	Coop, Feria	26 representatives from 13 L.A. countries	?	Conversation: two man-days
Puyo Area Communities	Hacienda	Two or three communities	1 group: once a week	Game introduction one man-day
Brigadas Estudiantiles	Letter Dice, Rummy	35 students 8 campesino villages	every day for 6 weeks	Show and Tell 2 man-days
Normalistas	Letter Dice, Hacienda, Rummy	54 new teachers	once a week, four weeks	None: trained by SEV
Centro Ecuatoriano de Educacion Familiar	Fotonovelas, Number Dice, Rummy, Market, Hacienda	25 "institutional change agents"	unknown	Show and Tell one man-day
Number of new organizations using our techniques:	Number of techniques adopted or adapted:	Number of Participants:	Average Intensity of Use:	Average UMass investment:
<u>10</u>	<u>14</u>	<u>About</u> <u>1700</u>	<u>1 or 2</u> <u>times per week</u>	<u>1.1 man-day</u> <u>per group</u>

an average UMass time investment of only about one man-day per group, we can afford to cultivate "spread effects" without much worry about becoming overcommitted. Our Free Access to Information guideline has been successful in getting nonformal methods used in many more situations than we could possibly have monitored.

### Measures of Learning

This section will be quite short, as during the first year we simply did not have the time or experience with the materials to set up and run a controlled evaluation from which we could confidently present results. Further, maintaining experimental controls is a disruptive influence, and we decided not to risk using them on the initial groups. We did attempt to measure learning, and will summarize below the preliminary results we obtained.

Comprehensive Achievement  
Monitoring:\* Progress in Math

Immediately after we introduced six math games to the facilitators in late April, we administered the first of

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\* Comprehensive Achievement Monitoring (CAM) is a fairly new technique for measuring students' progress in mastering previously defined learning goals. It consists of a series of parallel tests administered during the term, each of which covers every goal for the term, so students should score progressively higher as they cover more of the course material.

three parallel monitors ("tests," for the unreconstructed . . .) in the seven communities. A second administration in June and another in September completed the process. The one page monitor was built up from objectives identified by the facilitators in the April follow-up. These were that the participants should

1. Develop a liking for math.
2. Like the games.
3. Learn to identify numbers.
4. Be able to perform the four arithmetic operations.
5. Be able to formulate and solve problems on their own.
6. Be able to use decimals.

From May to June there was observable improvement in everything but liking of the games, although it was clear that the problems had been a bit on the easy side, resulting in a ceiling effect--that is, the first scores were so high, it was difficult to improve on them.

The September application tailed off, partly because of the abovementioned ceiling effect, and partly because of something mentioned in chapter five: although the total number of people taking the tests stayed almost constant, in September they were largely not the same people. One of CAM's assumptions was thus unjustified, since it presupposes that the same individuals are taking the test each time it is administered, having covered more of the pre-established curriculum each time.

The facilitators stated that the late starters were generally people with less educational background than the

original group. They took some time to overcome initial fears. The results would be biased downward and largely uninterpretable under CAM assumptions. To avoid threatening participants we had not required them to sign their names to the monitors, so we lost the chance to check continuity. The writer was responsible for that unfortunate decision.

TABLE 4  
SUMMARY OF CAM RESULTS

Goals	May	June	Sept.
Increased liking of mathematics (scale of 1 to 10)	9.03	9.38	9.32
Feeling toward math games (scale of 1 to 10)	9.19	9.15	8.94
Number identification (% correctly identifying 4 numbers read by facilitators)	67.16%	86.92%	56.69%
Problem solving (% of 4 given problems in addition, subtraction, multiplication and division solved correctly)	82.27%	86.15%	83.86%
Forming and solving problems (% as above, except that participants were required to make up their own problems)	62.50%	73.65%	79.53%
Decimal problems (addition, multiplication and division)	33.50%	35.90%	33.86%
Participants	134	130	127

Laboratory Evaluation:<sup>5</sup> Letter  
Rummy and Multiplication Bingo

Both of these games are designed to promote skills, one in the use of letters, the other in numbers. They provide practice and build confidence in the formation of words and in solution of multiplication problems. The test was designed to discover whether playing the games for a short time would result in a measurable improvement in the basic skills involved.

The games were played by sixty people, twenty from each of three communities. Most were adult campesinos, but a few were children, and some of the adults worked in nearby Quito. All those who took part were at least partially literate.

Half the groups played letter rummy while the other half played multiplication bingo for about 40 minutes. Both groups were pre- and post-tested on the skills involved in both games.

Using a t-test, the results for bingo showed significant skill increase only in one community, that being where participants had wagered on the outcome, thus probably

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<sup>5</sup>Readers who want a more complete report of the experimental design and results should contact the Center for International Education for Project Evaluation Report #1, LABORATORY EVALUATION: LETTER RUMMY AND NUMBER BINGO, by Alfred Alschuler, Diego Andrade, and John Bing, January, 1973.

increasing the intensity of their interest. In the other two, no measurable change in skill level could be seen after the forty minute play period. The instrument was probably not sufficiently sensitive to mirror the improvement evident to observers.

Letter rummy results showed a significant change in the performance of those who played it, for all the communities taken as a whole. Overall scores improved about 40% after thirty minutes of play. Check against the control group showed that about half of that gain could be attributed to familiarity with the test, but the remainder was learning that had taken place during play.

More experimentation of this kind will be undertaken as the project goes on, and it is clearer which games and techniques merit closer testing. For now, it is enough to say that indications are that brief exposure to the games results in significantly increased literacy and numeracy when the activities are sufficiently ego involving.

Facilitator Project:  
CEMA Evaluation<sup>6</sup>

CEMA evaluators administered a pretest when classes began in December, 1971. At the end of their AID contract in October, 1972, they re-administered the test, finding

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<sup>6</sup>Informe final, op. cit., pp. 32-34.



what was mentioned earlier, that only 44 of the original participants had continued throughout the eleven months, although overall attendance figures had not dropped sharply.

Taking as their sample the 44 participants who had taken both the initial and final test, the CEMA team found that using the t-test they had significant increases in both math and writing. Writing was significant at the .01 level, math at the .05 level.\*

Each of the seven original communities had at least three people counted among the 44. There was no observable relation between progress in literacy and math and performance in community development. The village whose people showed the greatest improvement in writing was Balsayan, both of whose CD projects had flopped. CEMA<sup>7</sup> evaluators found a strong relationship between community development and a highly participative group process, however. The evaluators used a structured observation technique to rate facilitators on their ability to encourage people to take an active part in the classes. The communities whose classes were most filled with dialog were

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\* That is to say there is only one possibility in 100 that the observed writing improvement could have resulted by chance, and five chances in 100 that they could have "accidentally" improved so much in math.

<sup>7</sup>Informe final, op. cit., pp. 34-38, 56.

those who carried out the most community development activities during the year.

Facilitators were also held in higher esteem in the participative villages than in those where their leadership was more directive. Whether they were also more highly esteemed at the beginning of the project is impossible to say, but that is a possibility since two of the low-achievement communities were last-minute replacements and did not choose their facilitators.

The evidence is preliminary and tenuous in nature, but indicates that a leadership style which substitutes dialog for dictation can be a substantial impetus for involvement of people in change-oriented activities.

#### Summary

We have taken a brief look at several measures of several promises we made at the beginning of the project. Overall those promises have been kept:

Our materials, even when made by hand and in small numbers, are generally cheap. Training time and costs were low because participants were able to grasp the ideas quickly, and courses could be kept short. The materials have been used quite consistently throughout the year, as participants have continued to find them interesting.

Participants have made copies of much of the material, and outsiders as well have picked up on a number of the ideas and made use of them in their own work with very little input from UMass staff, so our ideas have become part of a process of invention rather than an end product. Spread effects are indicated by the fact that at least ten organizations picked up on no fewer than 1<sup>4</sup> of our techniques and directly involved some 1700 people in their use.

Observable learning has taken place as people used the materials, both for periods of a few minutes and over a number of months.

Use of some materials, especially dialog, seems directly correlated with CD activity.

CHAPTER IX  
IMPLICATIONS OF THE PROJECT

What We Have Learned from the Project so far

1. A felt need for literacy is a sufficient motivating force to bring a portion of the people in a campesino community together for daily meetings for a period of several months.
2. Campesinos without extensive training can conduct classes for their peers, and are acceptable to them as "facilitators" who eschew traditional trappings of leadership.
3. Rural populations have little difficulty entering into dialog and reflection on topics that arise from their literacy exercises.
4. The combination of literacy and dialog facilitates movement of these groups toward development planning and to action on concrete projects.
5. Not only the facilitators but also other participants in the classes can change their behavior vis-à-vis authority figures, becoming more efficacious in their dealings.
6. The above process is aided by games to reinforce learning, to conceptualize relationships, and to break down stereotypical images of the learning situation.
7. Further, the above mentioned facilitators can design and run training courses for campesinos from other communities, thus creating new cadres of facilitators.
8. The dialog concept can be extended to radio schools through the use of cassette tape recorders as a feedback device, allowing participants freedom to decide what they wish to do with the recorder. This seems to have some effect on self-image.
9. Organizations and individuals involved in development education are open to new ideas and techniques, and

will pick up on them for use in their own programs without external incentives.

#### Caveat

All of the above statements are of course based on a small number of people over a fairly short period of time. There is a serious question as to whether the experience would generalize even to other Andean countries, for even in different communities of the Ecuadorian sierra the way in which the ideas were accepted and implemented varied greatly.

Any plan to take what seem to be the obvious factors in this project and operationalize them elsewhere should not be undertaken lightly. There is room for doubt as to why the combination of factors seemed to work for the Ecuador project. Why it might or might not work elsewhere would be a considerably larger question.

Following are some of the things we don't know about the Ecuador project:

1. Whether the facilitator phenomenon works only in the small areas where we've tried it.
2. How long the model will continue to function, or what form it may take in later stages.
3. Whether the model will in fact prove to be self-renewing.
4. If the games are an integral part of the short-run success of the project, or if they represent only a peripheral gringo-sponsored activity.

5. Whether the organization and staff of the project is a crucial factor--i.e., whether the materials and ideas can be implemented effectively by others.

The danger is in the fact that there is so little that seems to work, the temptation is great for governments and international agencies to quickly marshal resources for support of anything that seems promising, but then as quickly to abandon the activity in favor of the next promising option. Fads in education and community development tend to bear out this concern, as first one maxim and then another holds sway with the experts.

The project's stance is to adopt a deliberate go-slow attitude, while seeking to learn more about what has happened and what might take place, both in Ecuador and in other areas. We do not want to be guilty of oversell.

#### Implications Tentatively Proffered

With that in mind, we can proceed to a discussion of the project's possible implications for rural third-world education.

#### Problems in Community Development

AID in its operations is continually in difficulties trying to determine where education leaves off and development begins, or vice-versa. One reason this continues to be a problem is that there are professional educators on

the one side, and professional community development types on the other, all attempting to define the boundaries of their responsibilities.

Community development professionals are generally serious about their profession, and are attempting to do the best they know how to bring underdeveloped areas a better quality of life. Much of the literature is now stressing how important it is that these professionals learn to know the people and situations in which they work, in order to operate from a base of understanding of the needs and resources in each community. There is a problem, however, in that these professionals are generally so over-extended that they have no time for the kind of living-in and sharing that would be necessary to develop an in-depth understanding of the communities in which they work. Also, the most underdeveloped areas are often those most difficult of access.

Further, there is often a communication problem. Even if the professional and the campesino both speak Spanish, there is a serious question as to whether they understand each other. Professionals tend to be from urban areas,\* and city-bred Ecuadorians have substantial difficulty in understanding country dialects.

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\* Chapter one's schooling statistics bear this out, simply because such a small number of rural people meet the educational requirements.

Another problem is discrimination. Often unwittingly the development professional carries with him the long-standing convictions of the upper classes that the campesinos are where they are and what they are because they are basically stupid and lazy. It is roughly analogous to the slum schoolteacher who knows the kids aren't going to learn anything, and the results bear him out.

In Latin America, this attitude is widespread in varying degrees, from the Colombian cowboys who slaughter Indians for sport to the enlightened liberals who want to do everything possible to give the campesino the opportunity to adopt the middle-class model. What it means for the development worker is that he is well aware of the difficulties in working with rural people, and isn't surprised that change comes slowly. Not incidentally, it is also the slowness of the process which means he will continue to be employed in the war on poverty, ignorance and disease.

Finally, it is the fickleness of development activity which makes the professional's work difficult. Budgets and programs change, emphases and people change with them, and progress stops or is redefined for reasons extraneous to the local situation.

An Alternate View:  
Deprofessionalized Development

Instead of worrying about what is community development



and what is education, and instead of trying mightily to overcome the obstacles presented by the different cultures, and instead of fighting to obtain more resources for the development bureaucracy each year when national budgets are already overreaching themselves, it seems to make sense to consider an alternative.

We shall here consider local leaders as development/education/change agents, first in the light of the difficulties noted above with professionals. Living-in to understand the community is no issue, since they have generally lived their lives in the one place. Communication with the local people is obviously no problem, nor generally is discrimination, since rural communities tend to be homogeneous in their makeup, so all suffer the same consequences.

Finally, one who lives in a community has the virtue of constancy. He can watch programs and agencies come and go, keeping his community's needs in mind while dealing with the vicissitudes of agencies and meeting his family's needs by farming, shoemaking, and so on.

In short, it seems that the major difficulties of community development professionals are not difficulties for local people. The facilitator project was developed with the premise that local leaders are able to fulfill the functions necessary to achieve change, such as:

helping the community to define its problems; locating relevant information and experts; identifying local and outside resources which can be brought to bear on the problem; and finally, helping the group to make a decision and to take positive action based on that decision. Further, or perhaps first of all, it is necessary for any change agent to educate the population to the point where they can understand the alternatives in order to intelligently decide what they want to try to do. This educational process--beginning with rudimentary literacy and math, and continuing through a rough kind of civics having to do with authorities and campesino rights--is no mean challenge in itself.

Project results to date would indicate that campesino leaders can meet the challenges of education and development for their communities. Chosen by their peers to receive perhaps no more than ten days training by other campesinos, they have demonstrated a capacity to understand the nature of the task and to absorb the new techniques presented to them. Upon returning to their communities they demonstrate considerable energy and ingenuity in obtaining the cooperation of a substantial margin of the community. Participation in the classes leads to dialog regarding the problems of the individuals and group, as well as to insights as to what they can do to help themselves. The facilitators at

first bear the brunt of searching for materials and information, and of confronting authority figures in a way they have never done before. Later other members of the groups begin to assume the negotiation role, and short-run successes with projects they have decided on brings reinforcement and renewed effort. The majority of the community takes no active part, but most are aware of what is going on. The facilitators make it clear that classes are not limited to any subgroup, and continually work to increase the numbers of actively involved people.

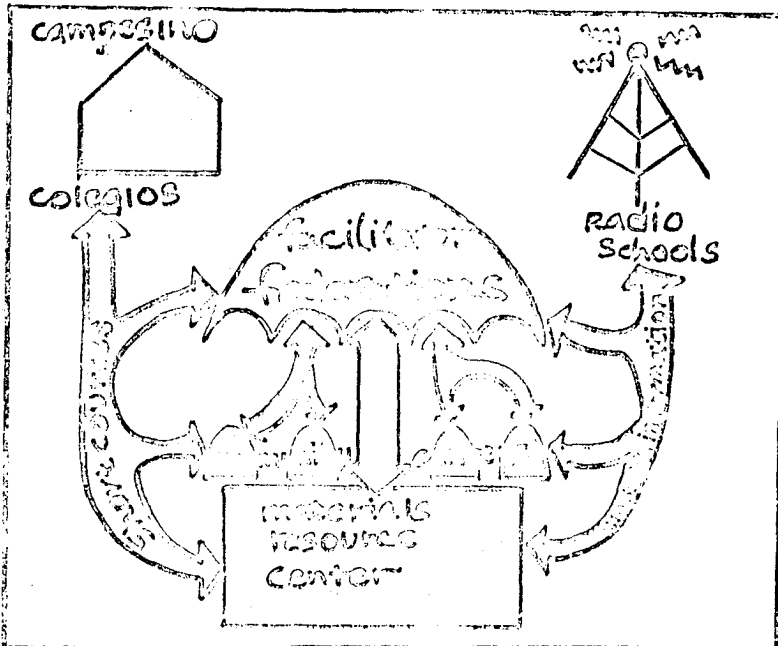
One of the basic working concepts in all this is that the facilitators are not employees of anyone. They are motivated by various goals--general community betterment, prestige among their peers, a chance to make contacts outside the community with other people like themselves--and later, by a kind of intoxication with the process of learning how to work in a group, to manage a meeting, to talk with a bishop, to bring an idea into reality. Their tangible rewards come with the achievement of change. They are socios in cooperatives, or learn new methods and skills to improve their farming. Basically they remain their own men and women, following an agenda which they themselves have decided upon.

Much of the counterproductive activity of professionals is eliminated, like intra-agency job protection, defense of

one's turf against other agencies, time spent on salary negotiations, or participation in vaguely-defined "perfeccionamento" courses which serve primarily as arguments for promotion. Facilitator independence means goals are locally set, not agency-determined. Further, the facilitators' role and activities can cease to function as felt needs are met, or be renewed as the occasion demands. This kind of "temporary organization" is untidy and limited in its goals, although not necessarily in its vision. The concept is difficult for an organizational mind to master. Campesinos seem to have less of a problem. .

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What Might Happen: A Differentiated Network



Linkage, not bureaucratic control, is the keyword of this section. A new bureaucracy in charge of nonformal education activities would be subject to all the difficulties and contradictions of the schooling bureaucracy, only more so, for it would inevitably be comprised of the Ministry of Education's failures. A nonformal bureaucracy should be resolutely avoided.

#### Facilitator Federation

If the facilitator model continues to work, it could form the backbone of a nonformal network. Local leaders trained by campesinos and capable of training others would be the basic element. Experience to date has demonstrated the desire for and the worth of regular continuing contact among the facilitators of different communities. There is presently a nascent province-level facilitator federation, the Federation of Campesino Leaders (FELCAM), meeting monthly to discuss problems and directions. With new trainees joining the facilitator ranks, the federation should grow as well. FELCAM is considering taking on information and training functions, and could serve as a clearing house of strategies used by campesinos to gain their ends--who to deal with in a given organization, what the necessary steps are to begin a cooperative, how to raise money to finance electrification, and so on. The

Federation also makes sense as a go-between for new training sessions, getting interested communities together with facilitators who could begin the process. Finally, it could distribute learning materials to new facilitator communities.

All the above could happen with a little help from friends. These friends might be: (1) international funding agencies; (2) radio school programs; (3) campesino colegios or high schools; and (4) the ministry of education.

International agencies should find such a project a natural. Once having provided funds for initial training sessions (and a rough calculation for rural Ecuador showed this might be done for about \$1.5 million) there would be no huge bureaucracy to support. Continuing financing might be provided for material production, as new need areas are defined through the mechanism of a campesino-run materials resource center. The agency grant would be for a definable purpose and period of time, with the continuing activity being so low-profile and low-cost as to make the always-onerous task of finding a national agency to support internationally-initiated activities a relative breeze. A project of this sort fits in nicely with the Ecuadorian government's aim to increasingly involve rural populations in the country's economic, political, and social life.

### Radio Schools

Radio schools have considerable potential to be a kind of second-level resource for the facilitators. Government acceptance of non-standard texts in the radio school program indicates there is more flexibility being shown toward radio school curriculum than toward that of regular schools. A responsive radio school program could use this flexibility to provide information and skills corresponding to communities' felt needs as expressed in the facilitator forums or monthly meetings. Features could include attainments of individual communities (with programs produced on the cassette recorders), interviews with agency representatives responding to campesino questioning, and in general a radio school curriculum emerging from the expressed needs of facilitator groups. The radio school would serve that portion of the participants who wanted something more than a utilitarian grasp of reading and math.

### Campesino Colegios

Campesino colegios could comprise another link in the network by specializing in short courses in agriculture, animal husbandry, manual skills, and so on, which could be given by agency representatives, outside experts, or campesinos. These courses would respond to needs expressed in the communities, possibly through the facilitator federation



We have not written about campesino colegios in this paper, but there are several examples for the interested reader. The project is beginning work with such a colegio in Cuenca, Ecuador, this year. Another similar undertaking, although it is called a university, is located in Buga, Colombia. Both churches and development agencies are interested in sponsoring this sort of institution.

Ministry of Education/  
Materials Resource Center

The Ministry of Education would probably participate primarily through the materials resource center. Texts and supplementary materials could be made available for use by campesinos, and ministry publishing facilities are already being used to turn out games and other nonformal materials.

The model developed in this chapter does not make reference to nonformal education departments of Adult Education, army literacy campaigns, and so on. Those programs reach a respectable number of people, and as mentioned earlier are picking up on nonformal ideas and methods. For purposes of this paper, however, we have concentrated on a system aimed at the much larger number of people presently untouched by those or other programs.

This tentative model is at best only a tenuous projection. In other areas and other times, there will be different kinds of institutions and groups which lend

themselves to working together.

How Might Change Take Place?

A hard question is reasonable to ask at this point: With concentration of efforts and resources now on traditional adult education and community development programs, is there a chance for a model of the kind we have just discussed to be adopted? Aren't all the eggs in other baskets?

A second question helps to clear up the first: Whose eggs? The UMass project gained some notoriety for proclaiming loudly that its clients were not the agencies or the Ministry of Education, but rather the campesinos themselves. It was to the facilitators that we listened when they talked about how the games worked or didn't work, or whether the dialog idea was useful in their classes, or suggested for new ideas we might try. Talking then about whose eggs, the campesinos clearly have little vested interest in the present approaches of education and development. For the most part they either have not been touched by those programs, or they smart in recollection of unfortunate experiences. The fact that nothing seems to work in rural areas means if nothing else that the campesinos' commitments are not to the status quo.

## Attributes of Innovations

Everett Rogers lists five attributes of innovations that affect the likelihood of their adoption.<sup>1</sup> They are:

1. Relative advantage. How the innovation stacks up against what one already has; is it better than the idea it would supersede?
2. Compatibility. Whether the innovation seems consistent with one's values, experiences and needs.
3. Complexity. How hard the innovation is to understand and use.
4. Trialability. Whether the innovation can be tried out on a limited basis without a drastic commitment or risk.
5. Observability. How easily others can see the effects of an innovation.

The kicker in all these is that all five factors must be looked at as they are perceived by the users--not as they are seen by the would-be-innovators.

Looking at the project as described in preceding chapters, the innovations can be reduced to four general components: deprofessionalization, dialog, games, and action. We shall look at these factors in light of Rogers' analysis.

Relative advantage.--Deprofessionalization seems to have considerable relative advantage from the viewpoint of campesinos. Even if facilitators achieve no tangible change, rural people would not have to put up with the kind

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<sup>1</sup>Rogers and Shoemaker, op. cit., pp. 137-157.

of discrimination that has traditionally been their treatment from the professionals. Dialog's advantage over the non-communication that is traditional in rural communities is mentioned continually by participants. Although effort is required to talk at the end of a hard day's work, they "vote with their feet" by walking to the meetings. Games have an easy advantage over alternative diversions in the campo--almost no recreational outlet exists aside from alcohol and sex, and both of those are limited by cost and opportunity. Anyway, games have been accepted with alacrity, at least in the short run. Action toward development is also the alternative to no movement at all. In days past, and perhaps in other areas of the country, there was and possibly still is strong resistance to any kind of change, but we have not seen that in our work in the Ecuadorian sierra.

Compatibility.--The project did not worry a great deal about compatibility at the outset, and ideas were of course borrowed from a variety of sources. The compatibility problem was largely taken care of by making the innovations "elastic," that is by not introducing anything as a hard-edged entity. Campesinos were free to accept or reject the ideas, and to change them in any way without apology to anyone. For example, it is hard to say exactly what the rules are for any game, because it is played different ways

depending how different groups feel most comfortable using it. The same goes for the dialog method, and the way in which communities go about decision-making.

Complexity.--Most of the project's ideas are simple enough to be grasped by almost anyone in a short time. In a game, no one is the maestro for very long, as others learn and improvise. The idea of sitting down and talking about problems is not complicated, although it may be difficult to carry out. And the idea of campesinos making their own decisions and acting on them is clear enough so that everyone can enter into the fun.

Trialability.--Getting together in literacy/dialog groups without having to make any long-term commitment is not a high-risk proposition. The use of the games lowers the apparent risk even further, for even if nothing else comes of the effort, the people who get together have a good time. For this reason also, introducing the games as part of an ongoing program is not a high-risk proposition for a teacher, and at least several primary teachers have picked them up for use as a classroom supplement. None of the activities requires a large commitment in terms of buildings or budgets--in short, the ideas are quite tryable.

Observability.--The games are observable. Generally when Hacienda was introduced, the whole community knew about it in short order, and the numbers who wanted to take

part grew quickly. Increasing observability often means increased risk, but that is not nearly so true if the observability is tilted toward diversion rather than being solemn and somehow ominous. During the entire project one basic aim was to avoid solemnity wherever possible. The simulation games stress a kind of irreverence, and the dialog encourages free interchange, with no one as the ultimate judge of ideas. Even real-life authority figures portrayed in the Hacienda game have played and enjoyed it, discussing with other participants the game's relation to reality.

#### Innovations and Decision Makers

What about the decision makers, those officials of governments and international agencies who allocate budgets and form policy? They see advantages differently, and observability presents a different kind of threat. Further, and perhaps most importantly, they have a loyalty to what already exists--present educational programs are a known quantity in terms of jobs and money; they can be expanded each year, emphases can be changed incrementally with minimal risk of disturbing the basic arrangements. A bold admission from them of the need to try something drastically different that promises no budgetary largesse for anyone--in essence, to give up on the idea of schooling the

campesinos into society--seems most unlikely.

Relative advantage is seen basically in terms of how it affects a department's budget. If the innovation calls for hiring more people and opening new branch offices, it is likely to be looked upon with considerable affection and enthusiasm. In this sense, the project's ideas offer a negative advantage, since their adoption would in effect be saying that a group now viewed as potential clients which just haven't been got to yet would in effect be taken off the list. Campesinos are now looked upon by the ministry's Department of Adult Education as people they should be reaching through adult education centers or night schools. Admitting that adult campesinos might have their educational needs taken care of in another way would be to eliminate some of the strongest arguments for enlarging the Department, which would clearly be seen as a disadvantage by Department functionaries.

If the decision were left up to staff at the operational department level, there is little doubt that the project as described earlier in this chapter would be voted down.

In terms of the other attributes, the project would have little difficulty. Being cheap, visible, simple, and try-able, the ideas can quickly be adopted by or adapted to existing programs, and would likely be seen by supervisors

as evidence of initiative and inventiveness. Students also would surely appreciate a break from the rigidly authoritarian routine of Ecuadorian classrooms, and everyone would benefit in his own way. So on the other scores, the project's ideas do well. What about the relative advantage question?

#### Change and the Idea of Paradigms

To look further into relative advantage, we shall refer to Thomas Kuhn's seminal book, The Structure of Scientific Revolutions.<sup>2</sup> Not that what we are talking about is either scientific or revolutionary, but we are discussing change and how it comes about. We shall make blanket apology at the outset to Author Kuhn for the injustice we shall do his theory. We shall unabashedly take quotes out of context and use them for our own ends, to illustrate why it may be the case that, relative disadvantage aside, some kind of new model might be acceptable for rural education.

#### A Brief Digression: What is a Paradigm?

To begin, a few words on just what a paradigm is. Roughly it is a kind of concrete idea or example which

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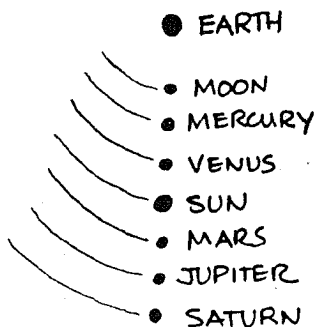
<sup>2</sup>Thomas Kuhn, The Structure of Scientific Revolutions (2nd ed., enlarged, 1970; Chicago: University of Chicago Press, 1962).



serves as an accepted model. We all have an idea of "chair," so that essentially constitutes a chair paradigm. It doesn't necessarily look exactly the same to any two people, but their ideas are close enough so they can go ahead and talk about how they might go about building a better chair--thus building on the paradigm and doing what Kuhn calls "mopping-up" operations.

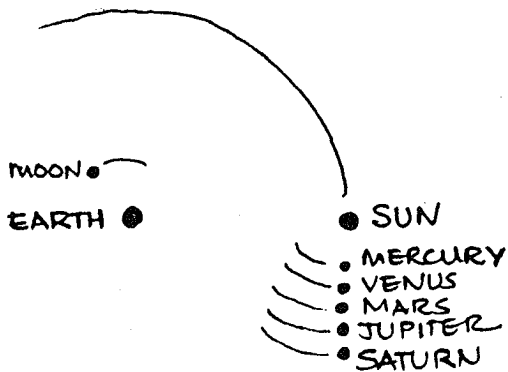
Paradigm development was involved in conceiving the idea of a chair in the first place. Then, besides just talking about how one might make a chair, the originator of chairs also had to convince people that they were not meant to sit on the ground all the time. Achieving that was something like what Kuhn calls a scientific revolution.

A more elegant example is the Copernican revolution.



Ptolemaic Theory stated that the sun and the other planets revolved around the earth, neatly if immodestly putting us at the center of the universe. As more heavenly observations were made, however, it became apparent that Ptolemaic theory wasn't consistent with all that was being seen and learned.

Instead of discarding Ptolemaic theory (no easy task, since it had been accepted for some 1500 years), scientists of the time sought to fix it up to make it explain the newly-observed phenomena. One Tychus Brahe came up with the following adaptation, calculated to preserve the earth as the center of the universe, but also to explain movements of heavenly bodies. This model lacks a certain elegant simplicity of the original.



Finally Copernican theory emerged with the brash notion that the earth was just one of several planets which revolved around the sun. The idea found rough sledding, but it did explain the anomalies which under Ptolemaic theory were inexplicable. Once past the emotional, psychological, and political hurdles, Copernican theory was accepted and stands today.

With apologies for such a brief treatment of one of the most important revolutions in the history of thought, we proceed to an also brief discussion of change in rural education.

#### The Education Paradigm

We shall incur Kuhn's wrath at the outset by saying for purposes of this little illustration that school is the existing educational paradigm. (Mr. Kuhn questions whether any paradigms exist in the social sciences.) When an educator thinks of education, it is virtually impossible to imagine it without schools, even with all their problems. That overarching idea has affected the programming and planning of educational endeavors throughout the world, so that adult education, vocational education, religious education, and just about any other kind you can name are given in schools. Until recently, schools have been assumed to produce the kind of learning and behavior change desired in

their students.

### Schooling's Assumptions and Goals

In short, consciously or not, the decision to employ a particular piece of apparatus and to use it in a particular way carries an assumption that only certain sets of circumstances will arise.<sup>3</sup>

Schools are established so teachers can teach, students can learn, and when they finish they will know something useful about themselves and relevant to what they will be doing in the real world. Those are the circumstances that are expected.

### Anomalies of Schooling

Whether schools are really doing what they set out to accomplish is now being severely questioned. Everyone is familiar with the litany of problems. At first the troubles were viewed as the fault of the students, or as isolated incidents, but continuing strife has led them to be viewed as endemic. Kuhn says that awareness of these problems emerges with difficulty, but

Further acquaintance, however, does result in awareness of something wrong or does relate the effect to something that has gone wrong before.<sup>4</sup>

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<sup>3</sup>Ibid., p. 59.

<sup>4</sup>Ibid., p. 64.

Much force, then, is expended on trying to fix up the schools, to remedy what went wrong before. Teachers are retrained, new technology is employed, students are even given a voice in the proceedings. But the problems continue.

In the third world, something is even more obviously wrong. Not only do the schools have the same kinds of problems as in the developed countries, they also face the embarrassment of only reaching a small percentage of their target population.

#### Movement toward Change

The anomaly itself now comes to be more generally recognized as such by the profession. More and more attention is devoted to it by more and more of the field's most eminent men.<sup>5</sup>

Today articles on the problems of education fill educational journals and popular magazines. Critics are invited to speak before such august organizations as the Society for International Development, where criticisms are met with a standing ovation. Big Names in education are writing about the crisis, talking of the need for new approaches.

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<sup>5</sup>ibid., p. 82.

## Surveys and Change

In the absence of a paradigm or some candidate for a paradigm, all the facts that could possibly pertain to the development of a given science are likely to seem equally relevant. As a result, early fact-gathering is a far more nearly random activity than the one that subsequent scientific development makes familiar. Furthermore, in the absence of a reason for seeking some particular form of more recondite information, early fact gathering is usually restricted to the wealth of data that lie readily at hand.<sup>6</sup>

Surveys are cataloging third world education efforts that might provide a useful example to others. Sheffield's survey of African nonformal education<sup>7</sup> was the first major effort. Paulston<sup>8</sup> has compiled a good bibliography of non-formal education activities around the world. Coombs<sup>9</sup> is working with a team to prepare an international survey of nonformal education. Those and other similar projects attest to the recognition that there is no effective paradigm for education in the third world--and as we have shown, if that is true, it is true in spades for rural areas of the third world.

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<sup>6</sup> Ibid., p. 15.

<sup>7</sup> James R. Sheffield and Victor P. Diejomoah, Non-Formal Education in African Development (New York: African-American Institute, 1972).

<sup>8</sup> Rolland G. Paulston, ed., Non-Formal Education: An Annotated Bibliography (New York: Praeger Publishers, Inc., 1972).

<sup>9</sup> International Council for Educational Development, Nonformal Education for Rural Development (Essex, Conn.: ICED, 1972).

The Ecuador Project:  
A "Competing Articulation"

The proliferation of competing articulations, the willingness to try anything, the expression of explicit discontent, the recourse to philosophy and to debate over fundamentals, all these are symptoms of a transition from normal to extraordinary research.<sup>10</sup>

Although one cannot say as yet that there is a proliferation of competing articulations, their number is growing. The Ecuador project is among the first to attempt an intentional response to the crisis, by putting together a series of experiments that have the potential to become part of the preparation of a new paradigm. More similar efforts will follow shortly.

Accompanying and supporting this competition is the willingness to try almost anything, especially on the part of program people, the decision makers to which we made reference above, and in relation to whose decisions this section is written. In the United States Agency for International Development and the Ford Foundation, in the World Bank and UNESCO, doors and pocketbooks are being opened to this kind of extraordinary research. Seeking new responses instead of patching up old ideas has been given top priority.

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<sup>10</sup>Kuhn, *op. cit.*, p. 91.

### Change and Insecurity

Because it demands large-scale paradigm destruction and major shifts in the problems and techniques of normal science, the emergence of new theories is generally preceded by a period of pronounced professional insecurity.<sup>11</sup>

Now we are back to the relative advantage problem, but with some new information. Precisely because the problem is recognized as a crisis, there is more hope that new proposals can be tried. The go/no go decision will simply not be left in the hands of lower-level officials who would otherwise bottle it up. Fact: when the international agencies decide they want to try something new, cooperation is forthcoming from at least some host country governments whose train of thought subtly alters to jibe with the uses for which money is offered. Those in the professional ranks who are content with the old, or whose vested interests lead them to reject tampering with the status quo, experience Kuhn's "pronounced professional insecurity."

### Change and Ambiguity Tolerance

Something is underway. What will result is not clear, and will surely take time to emerge. What seems clear is that there must be a "variety of competing articulations" before any kind of quasi-paradigm can make itself felt.

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<sup>11</sup> Ibid., p. 67.



Researchers must move beyond surveys, new ideas must be tried with the cooperation of the "marginados" who are the new clients. Efforts like the Ecuador Project must be attempted in a variety of third world cultures. With real involvement of the client populations, culture-specific solutions will begin to emerge, each valid for a given area or people. Later common factors will become more visible, and maybe the glimmerings of a paradigm. Only in that way will it be possible to "invent or rediscover an education system that fits its surroundings"--and one must agree with Faure, surely this is where the solution must be sought.

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### General Project Descriptions

Proposal Nonformal Education in Ecuador Project,  
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Six-Month Report, July, 1972.

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#### Case Studies:

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"The Ecuador Project," David R. Evans and James Hoxeng.

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All above documents are available from the

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