

XD-AAN-847-A  
ISN 26992.

# TECHNOLOGY WITH A HUMAN TOUCH....

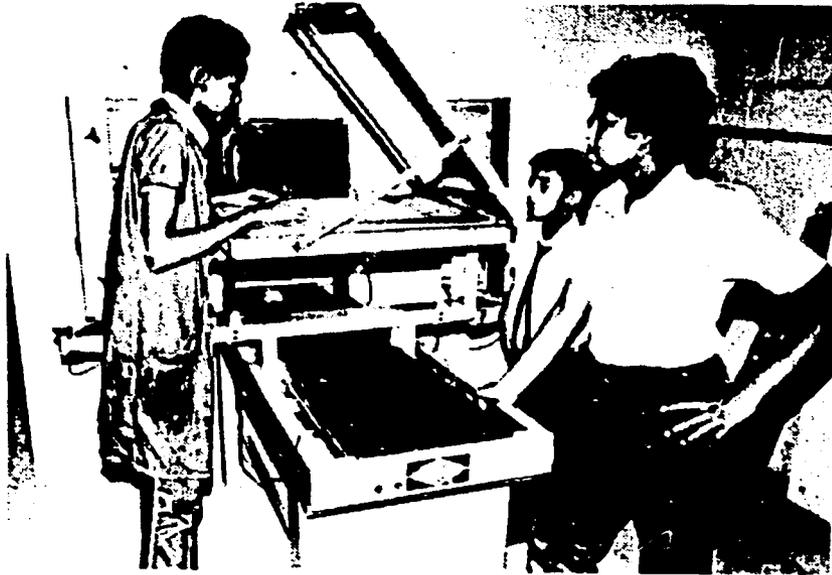
Vocational Skills Training for  
Disadvantaged Youth



An In-depth Evaluation of the Organizational Capacity and  
the Quality of the Instructional Program at the Escuela  
Anzoátegui Skills Training Center, Guayaquil, Ecuador

Gene Lamb, Ph.D.  
Arquimides Armando Orellana, Ph.D.  
Program Evaluation Consultants

USAID/Ecuador  
OPG#518-0007



## ACKNOWLEDGMENTS

The members of the "Anzoátegui" project evaluation team wish to acknowledge their sincere appreciation for the assistance and contributions made to the team during their stay in Quito and Guayaquil. Particular appreciation is given to Mr. Patricio Maldonado, Program Officer, USAID/Quito who not only afforded us a comprehensive analysis of the project upon our arrival, but encouraged us to use the evaluation process as means for effecting program improvement at the school level. This decision we feel contributed significantly to the total effort of this review and especially to the future educational leadership resources at la Escuela "Anzoátegui". More importantly, Mr. Maldonado shared with us his warm and cordial friendship throughout our stay in many informal and enjoyable situations.

Special thanks also goes to Messrs. Adriano Salazar, Angel Solórzano and William Lundy, the three chief administrators at the "Anzoátegui" school. To appreciate the time, consideration and effort that these gentlemen gave to this evaluation is to appreciate what it is to give hours upon hours of one's personal time and weekend to a highly concentrated and serious problem solving analysis. Indeed, the results of this evaluation, and, more importantly, the resultant implementation plan could not have been prepared without the contributions of these three persons. Added to this is the cooperation given to the project by Mr. Gustavo Illingworth, President of BSFG, in a number of instances. Although he is a busy gentleman in the community he did make himself available to us when we asked him to, and he cooperated to the fullest extent of his ability. We especially appreciate this not only because of his willingness to work with us over some of the critical problems that we faced, but because we consistently shared with him our serious concerns about the project in sometimes unflattering ways, and impressed upon him his important role in the implementation of this project.

In a less direct way, but certainly with no less degree of appreciation, we wish to thank Mr. Ed Wilkinson, Acting Consul General in Guayaquil and Messrs. Lee Carter and Gonzalo Batallas for their assistance. They opened their doors to us and provided us with office space and equipment so that we could successfully carry out our work.

Also special thanks to Ing. Rodolfo Idrovo Rosales, Regional Director of Servicio Ecuatoriano de Capacitación Profesional, in Guayaquil and his staff who kindly offered their unconditional cooperation in assisting the Escuela "Anzoátegui" in developing and improving its curriculum and instructional materials and the teaching skills of its instructional staff.

Finally, special appreciation is given to Ms. Carmen Arteaga, our secretary on this project. Ms. Arteaga not only proved to be an exceptionally capable typist, but also an exceptionally fine person with whom to work.

GGL

AAO

## The Professional Dilemma Confronted In Evaluating This Project

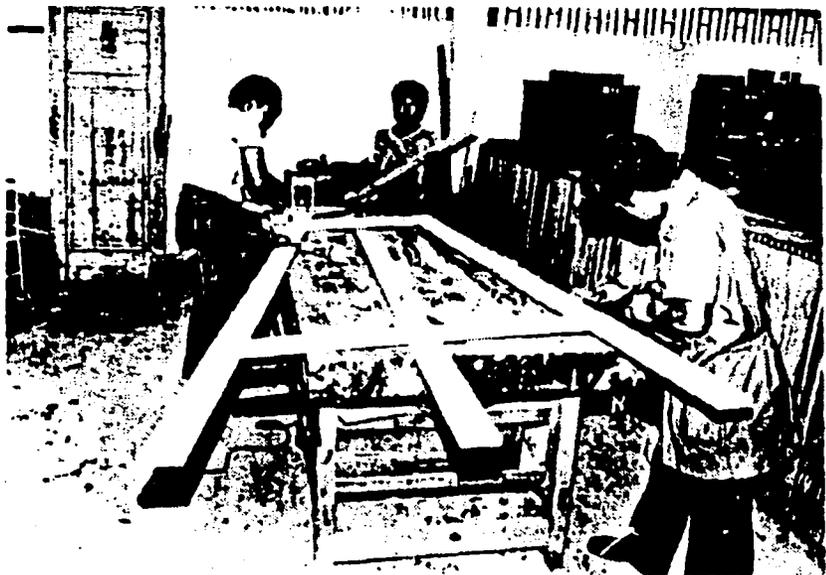
To those who may carefully read this evaluation report and project themselves beyond the written material into the hearts and lives of the teachers and children of the Escuela "Anzoátegui" for whom this report was prepared, the review team wishes to share the following statement.

As technologists of instructional systems, we have tried to work as administration and vocational education specialists. We accepted the Plan of Operation as it was written; established criteria based on the goals of the project as well as our understanding of quality education; studied conscientiously the objectives of the project in relationship to how well they addressed the expressed development needs of Guayaquil, Ecuador as these needs are manifest to the everyday lives and personal circumstances of some 500 disadvantaged youth attending "Anzoátegui."

We approached the evaluation task with all due respect for objectivity and the desire to collect hard data. At times we even "pushed" and "needled" to get to the essence of a matter. What we don't know, and feel obligated to share with our readers, is our lack of knowledge as to the desire to which our "needling" or "pushing" for objective data may have warped or prevented certain subtle, sensitive aspects of the project to emerge.

Where the empirists in education might argue that something isn't real (happening) if it can't be measured; we aren't totally convinced that everything in the "Anzoátegui" project that was happening could be either fully described or effectively measured. Said in another way, we recognize that not everything that has been described in the project has necessarily been quantified. Furthermore, we don't believe that it could have been or has to be.

Like the poet who tries to describe the beauty of the butterfly: as hard as he tries, as well as he portrays the beauty of his visions through words and phrases, there is simply no way he can match the colorful flight of the butterfly to the perceptual experience of seeing it dance merrily up and down, over and under and against the rays of a glittering sun.



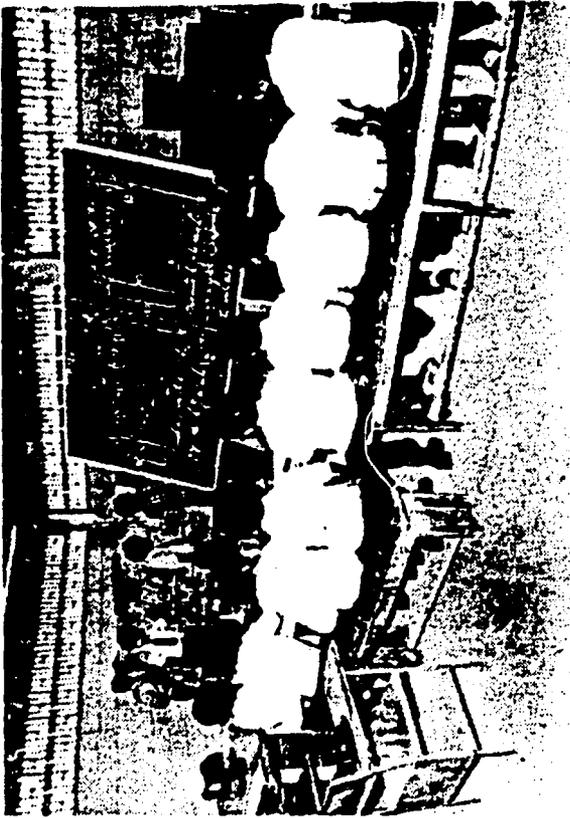
As this inability to fully describe beauty is always a dilemma for the poet, so too was our effort to fully quantify and qualify the "Anzoátegui" project with due respect given to its total cultural dimensions, a dilemma in evaluation for us.

Even though we respected the fact that the grant was designed to solve serious education problems of disadvantaged youth, we also respected the fact that the project evolved from and operated within the strong, social, cultural and political traditions of the Sociedad Benemérita Filantrópica del Guayas; traditions that have gained good reputations over the years for their influence in providing educational programs to serve the needs of poor boys.

For these reasons, and perhaps others beyond our recognition, we admit to three small concessions:

1. We tried to listen to program developers and operators as much as we could to arrive at just decision regarding program accomplishments. That is, we made every effort not to put program people on the defensive about specificity and quantifiability of objectives; rather we encouraged them to participate in the evaluation exercise by analysing means-ends relationships in their project and by building on the strengths and successes of their project, rather than to complain excessively about failures.
2. We accepted the possibility that some worthy goals in the project were not reducible to quantifiable data at this given point in time.
3. We tried to be content with the fact that this was an evaluation of interim objectives, (formative rather than summative) representative of interim goals, therefore, reflecting programs that were only partially developed or partially implemented.





**Previous Page Blank**

## INTRODUCTION

### Project Background<sup>1</sup>

The "Escuela de Benemérita Sociedad Filantrópica del Guayas" was founded in 1849. The 129 year-old school has since its inception concentrated on providing a free education for youth from poor families, predominantly in the province of Guayas. The school has remained true to this purpose. The program and services have been expanded an initial enrollment of 39 to 1,044 in 1978. These include 639 in the primary grades, 70 in the pre-artisanal year, and 335 in the vocational school (1°, 2°, 3° and 4° for one department).

A number of benefactors, like philanthropic citizens, banks, two Rotary Clubs, merchants and other industries contributed to the construction of modest functional buildings for the vocational school located in inadequate quarters in the center of the crowded city. Over US \$200,000 has been donated since 1971 for this use alone.

Three years ago industrial sponsors provided the financial resources to bring an executive volunteer of the International Executive Service Corps to Guayaquil, to make an on-site assessment. This individual is recognized with

substantive international experiences as a worldwide authority on vocational and technical education in secondary and post-secondary institutions and manpower training programs in industry; having served in industry and as the administrator (State Director of Industrial Technical Education) for the entire school system of the State of New York, for many years.

On-site assessment was made of the vocational school program. Characteristics of the labor market and job levels, needs of the youth of poor families, and the acceptance of the school's graduates and early school leavers were studied. A simple evaluation was made of existing secondary and post-secondary institutional programs, as well as government sponsored industrial training.

With the long-established history of the school, a rough estimate of over 20,000 youth from poor families, have completed their primary education; with approximately 6,000 receiving an additional "artisanal" training to develop marketable skills. The simple job skills and the limited technical knowledge required for these occupations have changed significantly. Many artisan crafts have been replaced by modern production techniques, equipment, and new materials for new products. National industrialization progress has created new jobs requiring many levels of competence. What

was at one time a viable program and services required substantial updating. In fact, total updating and expansion are needed to uniquely attack persistent unemployment and to replace hopelessness for over 800 youth annually from among the poor with new opportunities for self-support and as contributing citizens to the Nation's well-being.

#### Experiences in Project and Related Areas

The "Sociedad Filantrópica" has, without foreign or other technical assistance attempted, with modest success, to modify its program and services with its own staff and resources. Lacking specialized expertise due to many contributing constraints, artisanal training had not evolved into training consistent with changing labor market demands. The Sociedad recognized the need to make drastic program and human resource service changes beyond those that were made in moving the facilities to a new site.

In 1971 the Sociedad took steps to improve the quality and quantity of its program to more adequately reach disadvantaged youth. As a result, gifts from private individuals, were solicited (as cited earlier) for new buildings. Over US \$200,000 was contributed for the Sociedad's use in building construction.

Concerned individuals of Guayaquil, have ever since 1849 contributed through endowments and cash contributions to the Sociedad to serve youth of poor families.

Out of the Sociedad's resources, an annual expenditure of US \$172,000 is made for the total school program.

Some industries had indicated their willingness to become more active in support of the institution. The Chamber of Industries has stated its interest in providing substantial financial support over a period of years. Anticipated Financial support from these sources was included as part of the total support for the project. Additional financial support was to be forthcoming from other industries who felt that investment in human resource development through this long-recognized institution's program was in their interest as well as the Nation's.

The City Council of Guayaquil, and the Provincial Council of Guayas, recognizing society's responsibility to elevate the poorest of the poor endorsed the Sociedad on its contribution through training and education and have pledged their continuing support.

Whereas the BSFG's primary school is recognized by the Ministry of Education, the certificate of training given upon completion of the technical training program at Anzoátegui is not recognized by either the Ministry of Education or Labor.

## The In-Depth Review

On September 29, 1978, the BSFG signed an OPG with USAID/Ecuador for the project in question with the purpose of providing relevant vocational training for 860 youth annually from among severely poor families - training which will develop among these youth marketable skills which will allow them to gain employment and raise their families out of extreme poverty. However, actual implementation did not start until May 15, 1979.

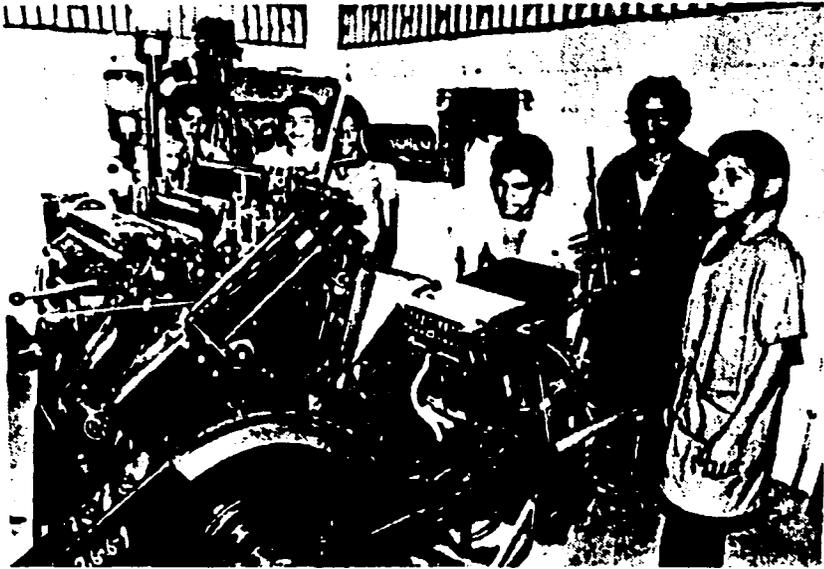
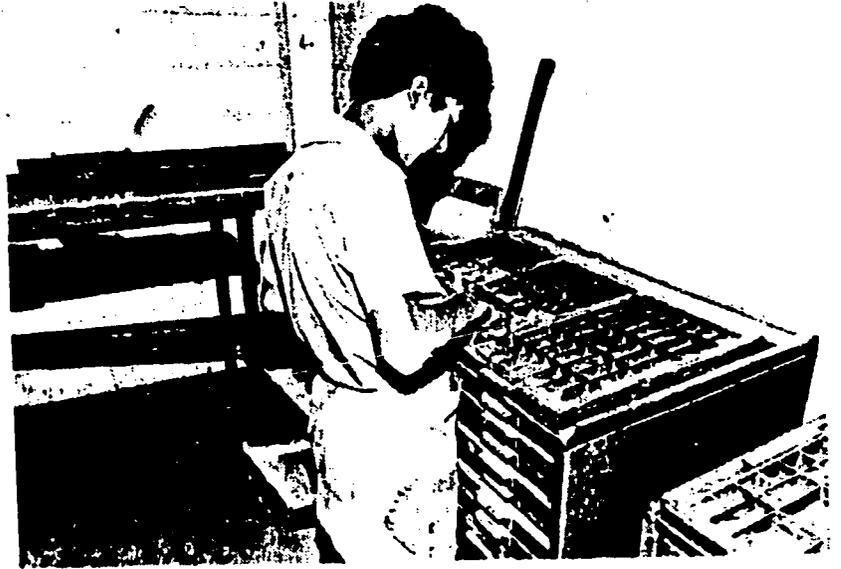
While the OPG provides for annual evaluation to determine progress towards achievement of project purposes, the Mission has decided to carry out an in-depth evaluation rather than a routine one because there are indications of serious problems in the implementations of the project by the BSFG.

The present team of evaluators intends to apply formative evaluation principles and techniques to:

- a. determine the progress in achieving project objectives,
- b. identify the nature of the technical management problems affecting project implementation,
- c. verify the effectiveness of project in order to permit an informed decision about continuing the activity, and

- d. provide a basis for selecting alternative courses of action, if appropriate.

The evaluators have chosen to apply a formative assessment strategy with the hope of developing and implementing more effective and flexible program evaluation skills among the leaders of the project. Toward this end, it is believed that better project management will result and will provide the leaders with not only a conceptual framework for continued evaluation activity but also the skills to develop their own diagnostic instruments, prescriptive measures and alternative solutions to problems which will carry the project on to its success.



THE METHODOLOGY OF FORMATIVE EVALUATION  
AS IT APPLIES TO THE BSFG-OPC PROJECT

Criteria and Key Questions

This program review is intended to serve a number of serious purposes for both the BSFG project and the funding agency, USAID/Ecuador. Essentially, its primary purpose is to evaluate the quality of program implementation to date and to provide substantive answers or recommended options for future project management and operational procedures. procedures that will counteract current problems, bottle necks and failures. The focus of the review has been on those aspects of the project that affect the quality of instruction for participating youth. A serious effort has been made to make the results of the review serve as a foundation (bridge) between where the project is now quality wise and where it could be at the end of year 2.

An effective system of formative evaluation for a program of this nature must have the following characteristics:

1. The major purpose is to enlighten decision-making at management and operational levels.
2. The focus (emphasis) is on specific questions that are important to the organization; these are questions or issues relating to more effectively performing the service.

3. Data-gathering is related to (and limited to) the questions under study or examination. The instruments (questionnaires, forms, interviews, etc.) are built to get information that will be used in answering the questions.
4. Questions for evaluation are related to the theoretical, and procedural basis of the organization's work. The theory as well as the practical matters of operation are always subject to change, on the basis of the evaluations.
5. Descriptions, measurements, and assessments are carefully made by objective procedures. Guesses (when their use is absolutely necessary) are labelled as guesses. Opinions are labelled as opinions. Actual measurements are quantified when possible.

#### The Theory Behind This Evaluation

Evaluation demands both measurement and valuing. Measurement requires the use of a procedure to quantify--to provide an objective description. Valuing requires a procedure for assessing the objective description in terms of its worth--to allow the objective data to be related to some basis for determining value and significance.

Most educational evaluation is concerned with assessments (comparisons). Often the basic concern is for assessment of the consequence of a particular educative procedure. Sometimes the comparison is between two (or more) educative procedures or experiences. But in any case, the evaluation is incomplete until what is evaluated is related to what is desired or intended.

Scientific methods of analysis, description, and prediction make their greatest contribution to educational development through the procedures of evaluation. Curriculum decisions are of two basic sorts: (1) the what, when, how and (2) the why. Scientific methods of evaluation can provide considerable help with the former set of questions, but the help is most useful within a context of values arising from the continued analysis of why--the reasons, the intentions, the goals and the beliefs about what is important.

Thus the application of scientific methods of data gathering and analysis are relatively easy to relate to the what, when and how questions. But evaluators must not stop here; there are ways to apply scientific investigation procedures to the data underlying the why decisions as well. The major questions in this sector--the valuing sector--deal with who has the responsibility for setting goals, how

well are the goals clarified and communicated, and how responsive the system is to the goals.

The following series of questions and problems indicates something of the range of issues to which any thorough evaluation must be related. A sequence is implied in the list, but the particular situation in a particular evaluation project will usually demand alteration of this sequence. The major purpose of this list is to make the evaluator more aware of the many factors that impinge on an educational program, thus he can be more alert to the unchallenged assumptions and the inquiry gaps that afflict any particular evaluation task that is defined as less than thorough.

First, consider the assumptions upon which the list is built: evaluation of educational programs and services must have three functions: (1) informative gathering and assessment, (2) evaluation, and (3) future planning.

Information Gathering and Assessment,--Determining what data are needed and getting them was an essential step. Logical though this statement is, it is amazing how often an educational assessment fails to gather data before pushing ahead into passing judgments before gathering the appropriate data! Many evaluations begin from a framework of given services (institutions and programs). This approach

is always destined to be a less-than-complete picture of learners and their needs. The framework or focus of this evaluation has been on the learners and the experiences more than on the services or program per se.

The Rationale for the Evaluation.--Determining what was important and weighing the status quo against identified values and aspirations--was the most confounding problem. Quantitative data were but one sort of input; even more crucial were the data (and assumptions) about values--the inputs that provided the means for establishing the relationship between empiricism and human aspirations.

Future Planning.--In summative evaluations planning is less classically a part of the evaluation process; in formative designs the concern for improvement in programs and operations demands that evaluation be designed so as to require direct linkages between evaluation and planning. Here is the ultimately important "so what?" dimension. Here is the essential justification for the whole inquiry. Assessment that concludes with the shelving of reports has little justification for a project of this nature.

#### Questions that Must be Addressed

In organizing the review, the evaluation team used the International Institute for Educational Planning's Systems

Model for Evaluating Nonformal Education; UNESCO, Paris.  
We found it to adequately serve the initial planning needs of the research effort; when we arrived on the scene in Guayaquil, this model was extended to include a series of site specific conditions.

I. Information Framework

A. The target population as learners

1. Who are they?
2. Where are they?
3. What are their needs?
4. Which of them are being reached by the educational services of the project?
5. Which are not having their needs met?

B. The service programs

1. What are the species of service programs actually or potentially available for this target population?
2. What agencies currently have responsibility for each of the services?
3. What articulation exists among the programs and institutions?
4. What changes (enlargements, reassignments, etc.) have taken place in the past decade, and what has been the rationale for each?

C. The evident concept (the actualized concept) of education for the target population. (NOTE: regardless of any official formal enunciation of a

concept of education for this target population, a responsible data base must include an empirically deduced definition. The formal view and the informal views expressed through practices and policies are often highly divergent.)

1. What, in practice, constitutes being a member of the target population?
2. What do they need? (How do they see their needs?)
3. What can be done for them? (What do they want done?)
4. What do we think we are able to do for them?
5. How do we know when they are ready to progress from one service to another?
6. What constitutes being an educated person?

## II. Value Problems:

### A. Interpretation of the needs of the target population

1. What meaning is derived from the descriptive data in A. above?
2. What is the political consequences drawn from B. in relation to A. above?
3. Whose opinions affect and constitute A.1. and A.2. immediately above?
4. To what extent can a more clear picture of the status quo be derived?

B. The aspiration and commitment of the establishment

1. What is the model of educational services to which the several voluntary and private agencies are willing to be committed?
2. What is the commitment of the public agencies? To what model of services?
3. What are the differences between evident accomplishments (as assessed by all of the above) and the commitments?

III. Planning Problems:

A. Deriving meaning from assessment

1. Whose responsibility is it to enunciate evaluative meaning?
2. What changes are suggested by the evaluation?
3. What model for future attainment can be drawn?
4. What agencies and units will be charged with implementing change toward the new model?

B. Motivating change

1. What agencies are authorized to motivate change?
2. What communication processes can be used to stimulate the relevant segments of the public?
3. What reward systems can be identified or defined for the new model?

Applying the Model to the BSFG-OPG Project

One way to understand the evaluative process is to look at a pilot program such as this one and submit it to careful evaluation. Experiences in cross-cultural instructional

materials development suggest two sources of essential data if one is to increase learning effectiveness: (a) the continuing study of the target learners in terms of their social psychological characteristics; and (b) measurements of learning from the materials and resultant experiences. With references to the first of these, there is no substitute for continuous transactions with the target learners and for the anthropologists' sort of insights into what lies behind the overt behaviors and the facade presented to the outsider. With reference to the second, measurements and assessments are valuable to the extent that their meanings are reduced to workable and increasingly precise guidelines for subsequent productions of materials. In other words, if experience is expected to teach anything, it should provide a basis for doing a better job in the program than has been done in the pilot project. Evaluation should focus on the matter of what sorts of instructional experiences achieve what learning gains, for what sorts of people, under what sorts of instructional conditions. The need to learn these answers was so great that it was considered worth the risk of disrupting the program to some extent in order to get the data! These questions had to be answered; otherwise, the pilot project could only serve as a costly investment in a handful of people.

The evaluators of the BSFG project tried to attend to the basic problem of non-formal education: helping youth to find hope so that they can eventually help reconstruct their social systems, so that such embryonic hope will not be dashed against the rocks of economic oppression. We took the position that until we were able to see whether or not a given educational program had done more than increase the size of the oppressor-manipulator class and whether or it had been effective among people of unrealized humanity, the pilot project would not have done all that it should. These questions are perhaps more philosophical than scientific but we believe evaluation is concerned with values. What will people do with their new learning? Better themselves at the expense of others?

The following is an outline of many of the heuristic questions that formed the basis for the evaluation in this project. These questions were derived from two basic functions:

1. those that qualified as indicators of program-- philosophical, content, resources, and results;
2. those that formed the standards for project and program evaluation.

Utilized in a hierarchical fashion, i.e. Section A first through D and from "Purposes" through "Results" these guidelines served as a framework for setting more precise formative evaluation standards for the Guayaquil Skills Training Project. It must be noted that many of these questions were asked before the project was started, our purpose here is simply to show the integration and application of program indicators as they exist in projects such as this.

#### INDICATORS

##### A. THE TRAINING PROGRAM PER SE

- 0.1. Phenomena that determine the purposes of the training
  - 0.1.1. Diagnosis of educative intervention in terms of the needs in the area
  - 0.1.2. Diagnosis of educative intervention in terms of needs in the community
  - 0.1.3. Concept of meeting needs that underlie the training
- 0.2. Decision process that led to the training
  - 0.2.1. Decision origin
  - 0.2.2. Standards that directed selection of participants
  - 0.2.3. Material resources mobilization
  - 0.2.4. Techniques resources mobilization
  - 0.2.5. Financial resources mobilization

##### B. TRAINING CONTENT

- 0.1. Nature of content
  - 0.1.1. Information specifics
  - 0.1.2. Sources of information
  - 0.1.3. Quantity of information
  - 0.1.4. Group's product

2

- 0.2. Psycho-pedagogical factors
- 0.2.1. Didactics or approach medium
- 0.2.2. Group's productivity
- 0.2.3. Group's integration process
- 0.2.4. Definition of functions and/or responsibilities

#### C. TRAINING RESOURCES

- 0.1. Resources of the Environment
  - 0.1.1. Local conditions and influences
  - 0.1.2. Temporal conditions and influences
- 0.2. Material resources
  - 0.2.1. Quantity and quality of availability material
- 0.3. Human resources
  - 0.3.1. Participants, quantity
  - 0.3.2. Social/economical/cultural characteristics of participants
- 0.4. Technique for use of resources
  - 0.4.1. Coordination and curriculum
  - 0.4.2. Teachers approach to capacitation
  - 0.4.3. Materials and their improvement
  - 0.4.4. Control of execution
  - 0.4.5. Administrative organization

#### D. TRAINING RESULTS

- 0.1. Immediate results
  - 0.1.1. Information gains
  - 0.1.2. Instrumental and skill gains
  - 0.1.3. Work plans produced
- 0.2. Difference between training intentions and actualities
  - 0.2.1. Origins of failure
  - 0.2.2. Origins of failure
  - 0.2.3. Influence of unforeseen agents
- 0.3. Pursuant results (transfer)
  - 0.3.1. Group's level of achievement in follow-up of the training
  - 0.3.2. Population directly reached
  - 0.3.3. Evidence of use of the educative intervention

- 0.4. Differences between anticipated and actual activities
- 0.4.1. Origins of unsuccessful activities
- 0.4.2. Origins of successful activities
- 0.4.3. Influence of unforeseen agents
- 0.5. Induced effects

### Evaluative Standards

#### In Relation to the Training Purposes:

- Was there serious discrepancy between the general purposes of the training and the purposes of the educative intervention in the area?
- Was there serious discrepancy between the general purposes of the training and the aims of the educative intervention in the community?
- Was there close relationship between the particular purposes of the training and the community need that caused the training's origin?
- Did the group take part in the search for resources for the training?
- Did the community participate in the study of its resources?

#### In Relation to the Training Content:

- Did the content correspond to the training purposes?
- Was the information sufficient to satisfy the needs of the group being trained?
- Did the intellectual product of the group add new elements to the available information?
- Were the intellectual, educational and affective characteristics of the people being trained taken into consideration in the handling of information?
- Was the productivity of the group enhanced by the approach to content?

- In what ways was the relation between individual apprenticeship and group integration considered?
- Did the structure of training functions contribute to the group's autonomy and the task's fulfillment?

In Relation to the Training Resources:

- Were the mobilized material resources sufficient to achieve the aims?
- Did the environment conditions contribute to reaching the purposes of the training?
- What effects resulted from the participants' homogeneity or heterogeneity?
- Did the coordination and teachers' capability level match the group expectation and the demands of the educational intervention?
- Did the use of didactic material ease the apprenticeship process of the group?
- Was use made of feedback from the evaluation done during the training?

In Relation to the Training Results:

- Did the group elaborate work plans by the end of the training in order to assure the continuity of educative intervention?
- Did the final evaluation of the training indicate its success or failure (achievement or non-achievement of the goals of the program)?

Developing a set of indicators for use in the evaluation of a (skills training) program is always a complex task. Ideally, it should be undertaken by the entire project team in close co-operation. The indicators selected, in addition to being theoretically sound, should be sufficiently objective

to ensure that different people observing the same change at different times would describe and measure it in identical terms. To guarantee the validity of an indicator, other indicators of the same condition should be developed and used to provide support.

With this in mind, therefore, we shall move on to the analysis of the project on the basis of the indicators established for evaluation.

Due to the nature of the BSFG-CPG project, it was necessary to incorporate these indicators (and others that emerged on the project site) into two principal areas of concern: (a) Administration and Management and (b) Curriculum and Instruction. Under Administration and Management three critical analysis were made; (1) the organization and management of the project, (2) fiscal management and program costs and (3) the use of community advisory groups made up of commercial and industrial agencies necessarily linked with the training programs of the school. Under Curriculum and Instruction, we analyzed curriculum content, instructional methodology, pupil personnel services and materials and equipment.

## THE PROJECT IN LIGHT OF THE LITERATURE ON EDUCATION NEEDS OF DISADVANTAGED YOUTH

It is important for the Society and USAID/Ecuador to assess the goals, purposes and objectives of this project in light of what is known and what has been written in development education literature about the characteristics and needs of disadvantaged youth in Third World countries.

### The Problem In Perspective

The literature in this area strongly supports the purpose and goals of this project. Kahler and Droegkamp, for instance point out that over the past two decades has come the realization that both the problems of development and those of disadvantaged youth - and all youth, for that matter - in Third World countries must be viewed in a much broader economic, social and cultural perspective. More importantly, they report that the needs of disadvantaged youth (they refer to them as out-of-school youth) have typically not been met by the formal school system: it has not been able to keep up with either the demand in terms of number of youth needing education or with the range of educational training inputs required for development. Their conclusion is, furthermore, that it is unrealistic to expect the formal education system to meet these demands in the near future.

Numbers alone indicate that youth are a group with which development and educational planners must reckon. In some instances, the youth population under 25 represents more than 50% of the total population, and those youth who are out-of-school comprise a large percentage; a number which is continually on the rise...

Although impressive, the expansion of the formal school system in the past two decades has been unable to keep pace with the numbers of young people in developing countries demanding access to educational and training opportunities. Nor has formal education been able to keep pace with the wide range of educational inputs necessary for development. With its already restricted and strained budgets, it is unrealistic to think that the formal system will be able to meet the needs of a youth population which will increase substantially by the year 2000...

When increased population growth is coupled with poverty, unemployment, rural-urban migration, overcrowded urban centers and persistent inequities in allocation of scarce resources, the significantly high proportion of young people in the total population becomes an area for priority consideration by planners, governments and assistance granting organizations. In particular, the out-of-school youth segment of that population deserves special consideration for many contend that the preparation of youth in life skills and attitudes will enhance their contribution to development, both on a personal level and on the national level.

A great amount of stress in our societies is seen among youth in general, and more particularly among out-of-school youth. The use of the term youth in itself implies a grouping which lacks homogeneity; a grouping with problems and needs which are as diverse as the settings in which they exist.<sup>2</sup>

This project, its goals and purposes, are directed to the exact concerns stated above. From its inception, the project has focused on the technical/vocational skill needs

of disadvantaged youth. And were it not for this project and the education it supports it is readily evident that most of these children probably would be classified as out-of-school youth. So, we can conclude that overall general design and focus of the project is appropriate for the students it serves in light of what is known about the needs of disadvantaged youth and the implications of these needs for development.

#### A More Global View

Aside from the purely humanistic or social development side of this program are the subtle, and perhaps not so subtle, political and long range development implications. Here, we see that the "situation" of disadvantaged youth has broad range social dimensions. Again Kohler and Droegkamp help us understand the more "global" dimensions of poor, disadvantaged youth.

Above all, the situation of out-of-school disadvantaged youth should be seen as both political and a development problem. In the case of the latter, there is a need to change the overall picture rather than deal with only one specific aspect of it. With the former, the training of youth, and more particularly out-of-school youth, must be seen as an ideological process, one which demands the existence of political resolve on the part of the governments involved.

The literature speaks of feelings of alienation and manipulation on the part of youth. Many of the organizations working with youth have come to be viewed as institutions which try to enforce their own ideas and principles onto youth rather than permitting youth the opportunity of creating their own institutions and personalities.

Youth's rebellion is many times seen as a reaction to institutional inability to adapt to changes--societal, political, economical--as well as being a symptom of their anxiety with a system that does not appear to be responsive to their needs.

In the past decade an increasing focus has been placed on the growing youth population. International organizations and governments have become alarmed at the implications of such statistics:

The demographic change was foreseen long ago but not everyone was prepared for it. Unpreparedness explains the contradiction, the tensions, and the shocks that we are witnessing as youth move en masse into present day society and try to reshape it.

The rapid increase in world population has resulted in a world population which is predominately young. In the light of recent projections, it is estimated that the numbers in the 15-24 age group will rise from 519 million to 1,128 million in the 40 year period from 1960-2000. Today over three quarters of this age group are in the developing countries: 59 million in Africa, 322 million in Asia, and 44 million in Latin America.<sup>3</sup>

So we see rather dramatically that the "program orientation" of the USAID/Filantrópica project is aimed at the most needy in the most critical period of our world's development history.

To point this out is not merely to pat someone on the back to make them feel good about what they have done, but to illustrate: (a) the importance of the project itself, particularly as it relates to the ever pressing needs of youth in developing countries today; and (b) to emphasize that the generic problem from which this need evolves - the social, political, psychological and cultural environments surrounding disadvantaged youth - is both complex and difficult to address.

It is most important to understand this if one wants to effectively appreciate the "problems" and "promises" of this project.

#### Needs vs. Programs

Kohler and Droegkamp in their most comprehensive study on Third World youth were able to relate the needs of these youth to functional educational and training programs.<sup>4</sup> We can draw upon their findings and conclusions to further assess the operational features of the Anzoátegui project.

Table 1 below shows a comparison between the summary findings and conclusions reached by the authors regarding effective programs worldwide and corresponding features of this project. While some aspects of their research may not seem totally relevant to this program, the overall set of findings can very effectively serve as indicators for program assessment and evaluation.

TABLE 1

A Comparison Between the Kohler, Droegkamp Study on the Characteristics and Needs of Out-of-School Youth and Corresponding Elements of the Escuela "Anzoátegui" Job Skills Training Program

| Findings and Conclusions of Kohler and Droegkamp regarding the Employment Needs of Disadvantaged Youth  | Application of Kohler, Droegkamp findings to Corresponding Program Elements of the <u>Escuela "Anzoátegui"</u> Project  |
|---|---|
| <p>1. <u>A recurrent problem with most training programs for youth involved lack of adequate information as to the actual numbers of trained youth needed for a given situation.</u> This problem was compounded by the unavailability or unreliability of statistics, hurriedly planned and executed programs and internal or external pressures. In some cases, this guesswork resulted in the overestimation of the need for training while in others certain skill areas were left unmet. Good common sense and earlier admonishments that "the only safe rule is to examine each local skill market and its future prospects before plunging into a new training program" were in growing evidence in many projects but are yet to reach a state of common practice. (YMCA/ORT Senegalese Integrated Vocational Project, El Salvador Urban Labor Training Project). Detailed studies of the modern informal sector by ILO teams in West and East Africa where local skills markets in specific urban settings have been assessed would seem a logical point of departure for the development of additional skills training programs. Such studies for rural areas are still generally lacking.</p> | <p>1. The "Anzoátegui" project has built into it a requirement that there be a <u>manpower needs assessment</u> carried out the first year of operation. The evaluation team found that there had been only a limited effort made toward this objective - the associate project director reported that he visited the local office of human resources development and looked at its projections. There was no indication that these data or the experience itself had had any impact on the planning or programming of curriculum at the school.</p> <p>It would appear that this activity needs to be carefully planned and implemented early in the second year of the project so that the results can effectively be applied to the design and development of more meaningful vocational education choices for the students at the school. A method for maintaining current data on the needs of local skills training programs also needs to be developed from this activity.</p> |

TABLE 1 (CONTINUED)

| Findings and Conclusions of Kohler and Droegkamp regarding the Employment Needs of Disadvantaged Youth   | Application of Kohler, Droegkamp findings to Corresponding Program Elements of the <u>Escuela "Anzoátegui"</u> Project  |
|--|---|
| <p>2. The project review would seem to confirm earlier held contentions that <u>effective out-of-school youth programs must view "training" as only one component of the employment process.</u> In situations where training has been viewed in light of its linkages with a specific job and attention has been called to the need of an integration of both on- and off-the-job training, projects have enjoyed greater success.</p> <p>3. <u>Linking skills development and vocational training to realistic needs of the youth population was observed as perhaps the most crucial factor in determining the success or failure of programs.</u> The project review has considered some interesting examples of modifications and reincarnations of earlier programs, but few projects are of long enough duration or have sufficient extended funding to correct major deficiencies.</p> <p>4. <u>The location and scheduling of training were seen as critical factors impinging upon the success of skills training programs for out-of-school youth.</u> Often, programs have attempted to strike up a delicate balance between on-the-job and off-the-job training and the length of training. In some cases, the opportunity costs of full time training, especially in the context of off-the-job training and training outside of the environment, proved to be too great to attract youth to training projects, or to entice their families to permit them to attend. In yet other</p> | <p>The Project has built into its design, the requirement that the school establish a series linkages with potential employers and in particular on-the-job training for a certain percentage of students in selected vocational areas. Specifically, it calls for the training and hiring of 15 school industry coordinators and program advisory boards at the school and program levels. Evaluation team found that neither of these objectives had been met.</p> <p>One of the primary goals of the project for the first year was the complete revision (modernization) of the curriculum for the 1st year students-pre-artisinal (pre-vocational). If this could have been done in a competent manner, then the linking of vocational skills program selection (2°, 3°, 4° years) with needs of children would have been improved. Unfortunately the leadership in this activity, as well as, professional understanding of <u>pre-artisinal curriculum</u> was totally lacking. This area of concern still needs to be dealt with.</p> <p>4. This particular conclusion is not really applicable to the "Anzoátegui" project. However, there was no indication that the calendar or school program schedule were contradictory to the cultural ambience of the students.</p> <p>The evaluation team does believe, however, that consideration should be given to the possibility of utilizing the facilities during the afternoons and vacation periods in order to reach more youth and/or to provide additional training when necessary. It is estimated that the facilities are utilized 5 hrs. a day for 170 days a year; it is possible</p> |

TABLE 1 (CONTINUED)

| Findings and Conclusions of Kohler and Droegkamp Regarding the Employment Needs of Disadvantaged Youth  | Application of Kohler, Droegkamp Findings to Corresponding Program Elements of the <u>Escuela "Anzoátegui"</u> Project   |
|---|--|
| <p>cases, training at the end of a long day proved to be an additional burden to the already heavy schedule of women, youth and instructors.</p> <p>5. <u>The projects reviewed also support the growing concern that greater use be made of indigenous skill training systems.</u> It was noted that the occupational skills required in both the modern and the traditional sectors of the economy are often, if not almost entirely, acquired informally. And in the case of the former, much of the trained manpower is provided by the informal sector. This was reported some years ago through the studies of Callaway in Nigeria and has been substantiated in recent studies.</p> <p>6. <u>Youth with skills training appear to be more easily absorbed into the work force in urban areas than in rural areas.</u> Such an observation may be due to the ability of the informal modern sector to accommodate large numbers of out-of-school youth. It would appear from the literature review as well that urban areas have a greater capacity for nurturing new skills development while rural areas have a lesser capacity for doing so.</p> <p>7. <u>Few skills training programs meet the basic education needs (literacy and numeracy) of out-of-school youth.</u> Youth entering skills training programs bring a variety of levels of literacy with them. Because of lower rates of school participation in rural areas, it would seem that out-of-school youth programs in rural</p> | <p>to double the utilization factor without disrupting the regular school program.</p> <p>5. The "Anzoátegui" project meets this requirement very well. The training system that the project is supporting evolved from the traditional training program of the school. With the exception of the project training capacity affected by the intervention of Dr. Olivo, the technical advising of Mr. Lundy and the influence of instructions on the part of the 3 Peace Corps volunteers, the project is 100% Guayaquileño.</p> <p>6. The "Anzoátegui" project was designed in full complement to this recommendation. All indications show that the children who graduate from this program do find jobs in the urban area of Guayaquil, apparently with a high degree of success. This may be because of the level of training they receive (doubtful) and or the fact that Guayaquil is developing rapidly; or a combination of both. (probable)</p> <p>7. The project under evaluation goes beyond this recommendation which stresses the importance of developing <u>basic learning</u> skills as well as technical vocational skills among the youth in its program. The curriculum shows a strong balance between academic and technical subjects. However, the review team did conclude that</p> |

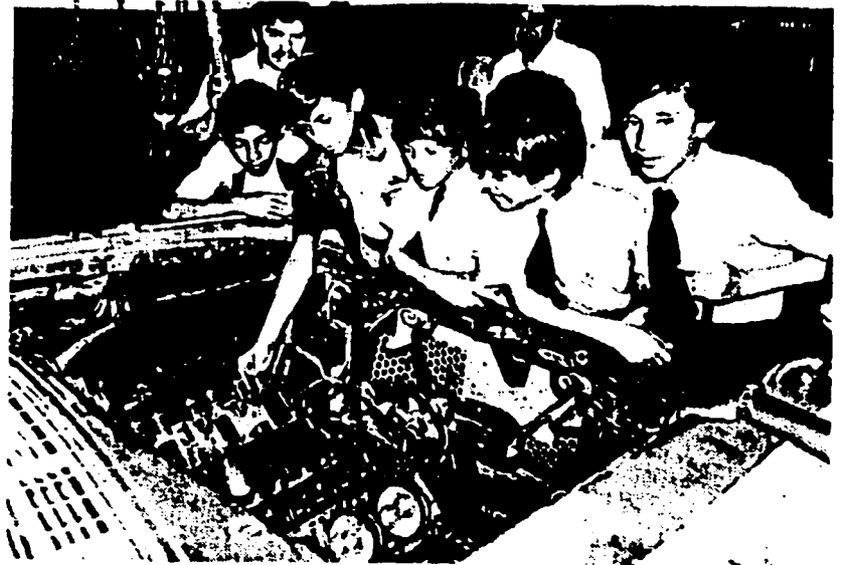
TABLE 1 (CONTINUED)

| Findings and Conclusions of Kohler and Droegkamp Regarding the Employment Needs of Disadvantaged Youth   | Application of Kohler, Droegkamp Findings to Corresponding Program Elements of the <u>Escuela "Anzoátegui"</u> Project  |
|--|---|
| <p>areas would, of necessity, have to be ready to remedy the basic education deficiencies of youth. From the project review, it is evident that there is a reluctance on the part of program planners and implementers to accept the responsibility for the "education" of out-of-school youth. It is the bypassing of the issue, which other researchers have noted as well, which contributes to the continued provision of services to the "lucky few" with schooling.</p> <p>8. No matter what skills youth are learning, it would appear that there <u>is a need for a managerial component to the skills training.</u> Our examination of skills training programs, particularly in rural areas, uncovered a strong bias in this direction as technical and managerial roles are often played by the same individual in rural settings, both in agriculture and nonfarm activities.</p> <p>9. The area of entrepreneurial training and the importance of such programs to the growth and development of marginal economic areas is underscored by the projects reviewed. In most instances, youth acquiring entrepreneurial skills must also have access to provisions for credits to begin business, regular follow-up and a solid system of back-stopping services to assist them in securing raw materials, marketing etc. <u>A crucial role in entrepreneurial training programs was noted to be that of the small business extension agent.</u></p> | <p>considerable improvements could be made in some aspects of the Academic training program: the acquisition of basic instructional materials, better utilization of visuals and improved teacher methodology.</p> <p>8. The project plan calls for the development of a managerial component somewhere along the way during the 3 year plan of operation. This would be consistent with this recommendation. However, the evaluation team could find no evidence of any development activity toward this goal during the period of their evaluation. Attention must be given to this component early in the second year. This is an area where business could effectively participate.</p> <p>9. This recommendation as applied to this project follows through with the implications cited in 8 above. Since, however, the BSFG-OPG project has not begun to develop this program component to date the comparison of this conclusion is not fully applicable.</p> <p>However, it is important to stress the need for existence of such technicians, who could suggest improvements to young businessmen and women are a vital part of the backup services offered.</p> |

of

In summary, therefore, we can say that the original design and orientation of the project seem to be right on target with respect to what development education specialists worldwide recommend for this specific target population. Moreover, we see that the project's goals and objectives are in line with those social development indicators that eventually support general improvement of the socio-economic conditions of poor youth.

If nothing else, this comparison points out: (a) the importance of the objectives of the project as originally planned; (b) illustrates where key weaknesses in the implementation of the plan are at this point in time; and (c) gives USAID and the Project Staff direction and focus for program adjustment and possible project amendments.



## INTENSIVE PROJECT REVIEW

In this part of the report, an intensive project review is carried out focusing on three general aspects of the project:

1. The organization and administrative management of the project. (Dr. Lamb)
2. The curriculum and staff development areas complete with brief analysis of equipment and supplies. (Dr. Orellana)
3. A generalized comprehensive analysis of the specific goals, objectives and conditions that are to be met at the end of the Project. (Drs. Lamb and Orellana)

While the authors realize that this scheme falls short of the comprehensive format illustrated by the program indicators cited in the Methodology section of this report, we believe that given the nature of the task we were asked to do, particularly Mr. Maldonado's concern for analysis of the administration of the project, it adequately meets our task.

In essence, this part of the report presents the findings of our study. And, occasionally we move from findings to recommendations, but normally we leave it simply as a descriptive analysis.

Organization and Administration  
of the Project

((Prepared by Dr. Lamb)

The organization and administration of the project was viewed by Mr. Maldonado to be one of the most critical components of the evaluation. In his words, "The project has been a continual problem administratively, from the very beginning."

Organizational Structure

The organization of the project is shown in Figure 1 below.

As this chart shows, the project officially falls under the direct administrative authority of Sarmiento as Director of the school, but Mr. Salazar is the person in charge (project manager) and must work under the administrative direction of Sarmiento, the official director of the school. Lundy is the technical advisor and reports directly to the Project director. Solorzano is the program coordinator and is responsible to Salazar.

The review team found this organizational arrangement to be ineffective for two basic reasons: (a) it failed to place the authority for decision making in the project at the point of impact of the program.- the school level. (b) it dislocated administrative authority throughout the system

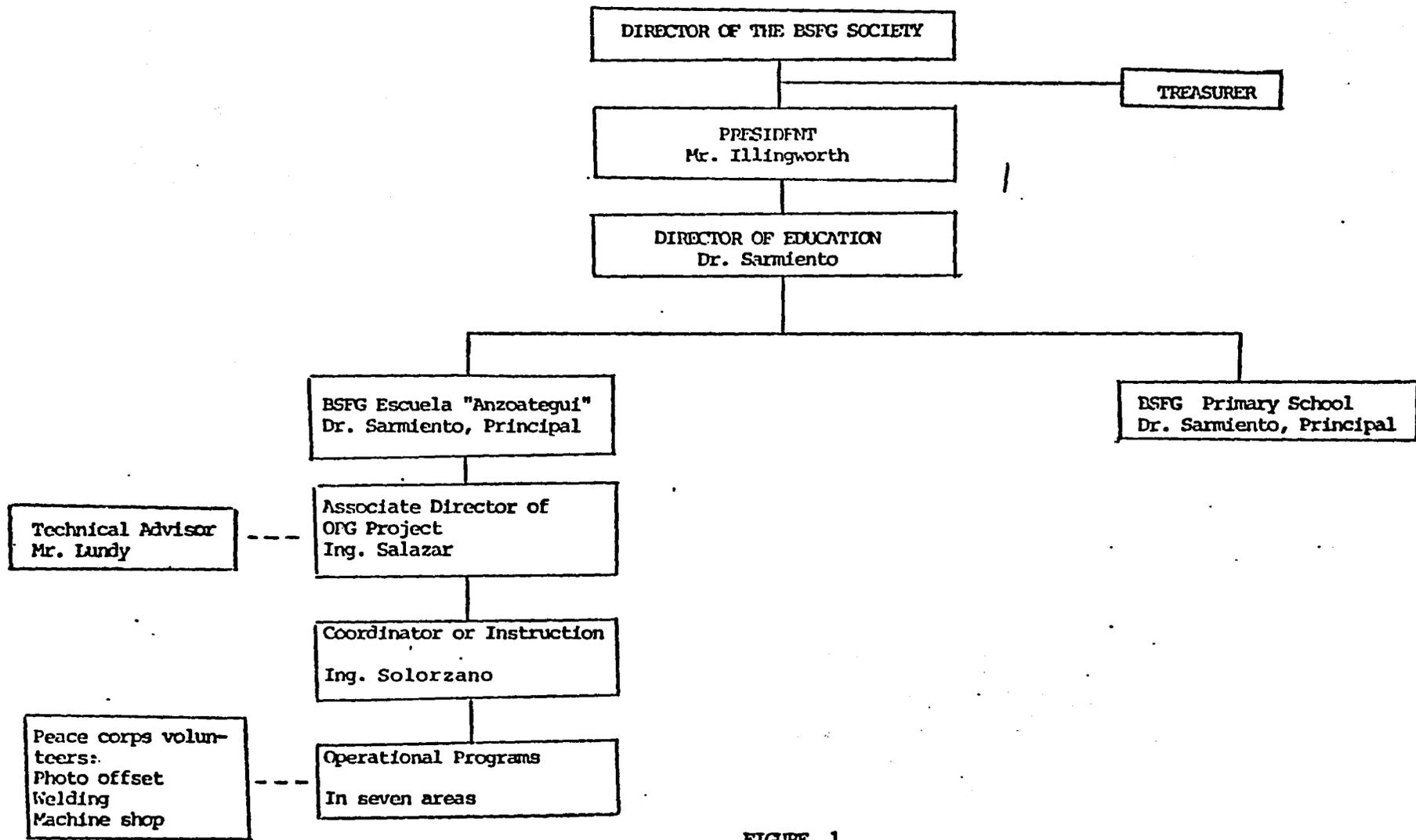


FIGURE 1

Administrative Organization of the Project, 1st Year

56

to the degree that no one knew who was responsible for what or to whom. Added to these factors were the fact that roles were not clarified or understood among team members; the director, Mr. Sarmiento, seldom (once every two weeks, at best) visited the school, never really got involved with the instructional program, especially the practical labs, and had not read the project paper so that he could know what was expected at the school level; Mr. Illingworth, the director in fact, seldom visited the school, would not hold staff meetings, and in the best sense of the situation, did not understand the management implications of the project's true purpose.

After much discussion and elaboration of many ideas, the following organizational chart was submitted to Mr. Illingworth for consideration. (See Figure 2). Essentially, it places more authority and responsibility on Salazar at the project level, and puts Salazar directly under Mr. Illingworth. This doesn't get Mr. Illingworth closer to the project physically, but it should open up communications between him and Salazar and remove Sarmiento from confusing the picture.

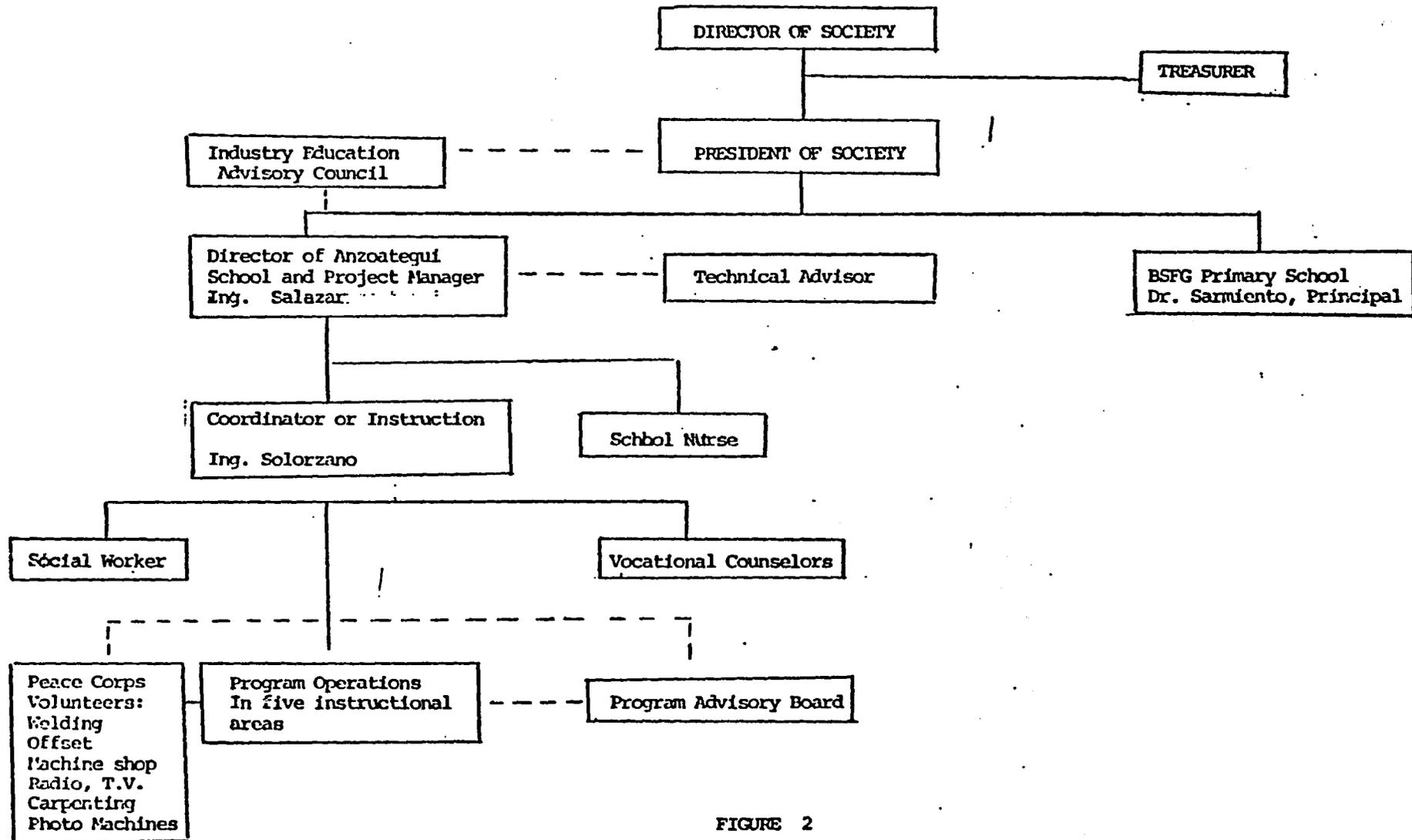


FIGURE 2

Recommended Organization for Continuation of Project

47

### Key Administrative Personnel Profiles

Essentially there are six key figures responsible for overall administration and management of the "Anzoátegui" project. These are, in order of their importance to the successful operation of the project: Mr. Gustavo Illingworth, President of the Filantropic Foundation, Bill Lundy, technical advisor in vocational education and administration, Mr. Adriano Salazar, associate program project director, Mr. Angel Solorzano, program coordinator, Dr. Felix Sarmiento, director of education for the Filantropic Society (Dr. Sarmiento is officially the principal of "Anzoátegui" and the Society's primary school, however, he seldom visits the skills training programs and barely involves himself in the operation of the school); Humberto Carbo, Treasurer of the Society. Before assessing the administrative capacity of the program in more detail it is necessary to understand some of the personal characteristics of four of these six key figures.

Gustavo Illingworth -- is a gentleman of 58 years of age who is known throughout the province of Guayas as being a long time friend and leader of the Filantropic Society and a popular promotor for the educational cause for which it serves. He is also the treasurer of La Junta Benemérita, a wide ranging filantropic program similar to the United Way Organization in the United States. Mr. Illingworth is an

intelligent man but does not carry credentials for any expertise or training. He is a person who is dedicated to the work of the Society. He was the initiator of this project. He believes in its basic goals but is presently overwhelmed with the effects of internal adjustments required by the organizational and administrative changes that have evolved during this first year of operation. By tradition, Mr. Illingworth holds tight control over the fiscal and management operations of the Society--this is also true for the operations of this project. It is at the heart of the problem.

The pressure that this project has put on Mr. Illingworth for decentralized decision making at the school level has been, to some extent, traumatic for him. He is not an educator; he does not really understand the instructional or organizational changes implied by the project, and more importantly, it's doubtful that he knows what a good vocational, technical schooling program should look like. It is important to stress here, however, that his situation is a result of ignorance and lack of experience in these aspects rather than any desire to subvert the project. To understand Mr. Illingworth's position, one has to know what it is like to run an organization with a tight fist for some 12 years, and then have many challenges made

to you regarding the need to "loosen" up on your authority. This phenomenon is present in all organizational change projects and consequently, Newton's Law of Force supercedes-- for every force there is an equal reacting and opposite force.

It must be pointed out here, however, that even though considerable time was given during this evaluation to Mr. Illingworth for the expressed purpose of helping him overcome some of his "constraining ways" and to better understand the means-ends relationship between decentralized decision authority at the program level and the project's ability to achieve program goals, there is no assurance that he will or can perform better. We do believe, however, that his ultimate relationship to the project staff and his ability to cooperate and meet his administrative responsibilities are crucial to the success of this project.

The conclusion of the review team is that Mr. Illingworth is willing to cooperate fully in the future and to carry out those functions for which he is responsible in a manner that will facilitate and not constrain key implementation procedures. Indeed, there has been considerable improvement in the past six months according to the project staff. If there is evidence to the contrary, then the

review team feels that there will be little or no change in the poor organizational climate surrounding the project: monies won't be released on time, the cooperation of industry will not be there (thus their contributions), and therefore, there will be little chance for success in the project. Because Mr. Illingworth's behavior is so critical to the success of this project, we believe that the minute two or three bottlenecks begin to form as a result of his non-responsiveness, the project be terminated.

Mr. William Lundy.--a former Peace Corps volunteer, hired as the U.S. technical advisor in vocational education to the project, is a gentleman of 60 years of age, with post secondary training in diesel mechanics and other vocational machine shop programs. His basic professional career was in the civil service, where he worked as a criminal investigator for the Department of Justice. From 1972 to the time he took this job, May, 1979, he worked as an advisor in vocational education in Iran, and for the railroads in California. By all paper qualifications, Mr. Lundy would appear to have adequate background to serve the project as technical advisor.

Interesting, however, is the fact that the first year of the project evolved to become a serious problem in project administration, organization and instructional leadership, areas of expertise that Mr. Lundy seemed to have difficulty

with. He couldn't seem to get his ideas for program implementation accepted; he became extremely frustrated with the lack of cooperation he was receiving from both the teachers and Mr. Illingworth (the person, who according to his contract, he should report to). He felt caught in the middle. On the one hand he believed he knew what a good vocational instruction program should look like, on the other, he couldn't relay this message to the powers-to-be.

As a result, when the project review team arrived, they found Mr. Lundy to be open to all suggestions, needing someone to talk things through with and anxious to tell his side of the story.

In the first place, there seemed to be a serious discrepancy between what his role was (contract wise) and what it turned out to be in everyday practice. Below, we see that his contract is well written in terms of what he should do and with whom he should work.

El Trabajador en calidad de Asesor Técnico...  
cumplir... [supervision y asesoramiento tecnológico  
en todas las áreas vigentes y las que se crearon y  
que corresponde al funcionamiento de la Escuela en  
mención, siendo tales áreas en la actualidad las  
siguientes: Pre-artesanal, Ebanistería, Tipografía  
Linotipo, Mecánica, Radio Técnica-Televisión, Off-  
set-Fotomecánica, Automotriz y Tornería]

The problem was that he had not been able to sit down with Mr. Illingworth and discuss the ramifications of the contract.

A second, and really more crucial aspect of the situation rested in Mr. Lundy's inability to "get ahold" of the project administratively and/or leadership wise. He simply couldn't get a good program management system into operation-- at least one that other members of the staff could identify with, feel comfortable with and/or contribute to. Consequently, the project was floundering badly when we arrived.

The evaluation team is concerned about Mr. Lundy's ability to provide the administrative leadership necessary to his role as technical advisor, but feels that it is necessary to give him some more time - perhaps the remaining six months of this year - to prove himself. What we were able to do effectively was help him to prepare a Management Implementation System Plan for program development for the of this year, complete with target dates, persons responsible, key factors that must be accomplished, etc. (See Figure 3).

PROGRAM IMPLEMENTATION PLAN

2nd Year

| Program Goal  | Person Responsible | Personnel Resources Required   | Starting Date | Finishing Date | Material Resources Needed   | Key Factors That Must Take Place if Goal is to be Reached  | Estimated Costs                                  |                                  |
|---|--------------------|--|---------------|----------------|---|--|--|----------------------------------|
|   |                    |  |               |                |   |  | OPG  | BSFG or Private Sector Donations |
| To develop a pre-vocational and vocational counselling coordinated active and progressive program to serve 800 students as follows: 300 pre-artisinal, 300 second and third year, 100 fourth year students. | Mr. Salazar        | 1 secretary<br>1 social worker<br>1 nurse<br>3 vocational industrial counsellors | July 25       | August 30      | 4 tables<br>4 chairs<br>2 typewriters<br>4 file cabinets<br>4 slide projectors<br>1 movie projector<br>1000 transparencies<br>35 shop manuals<br>10 vocational orientation Packages | 1. BSFG has to agree to hire staff.<br><br>2. Tight timetable for hiring staff and purchasing equipment<br><br>3. Skilled personnel available in Guayaquil.<br><br>4. Screening team needs to be established to recruit staff. | Materials<br>\$5,000<br><br>Equipment<br>\$8,000 | Personnel<br>\$13,000            |

Figure 3

Illustrative Example of Program Implementation Plan Developed by Consultants for Project Leadership

h5

Dr. Sarmiento.-- Is a gentleman of 69 years of age. He has been in education for more than 40 years. He has a university degree in law and has taught most of his career at the higher education levels.

The evaluation team found Dr. Sarmiento to be an interesting figure in the matrix of personnel. On one hand he is a key figure organizationally in the project-- the official principal of the Anzoátegui School -- on the other he divorces himself from all levels of responsibility for implementation of program goals. More importantly, he is the key bottleneck before Mr. Illingworth in getting decisions made regarding purchases, workshop equipment, curriculum changes, etc. He never visits the school unless he has a complaint or a problem to solve. According to Mr. Lundy, he said that he had never seen a copy of the Grant Program. He failed to make it to many of the evaluation meetings during the process of the review.

Finally, to best appreciate the negative influence that Dr. Sarmiento has on the project, particularly on the educational climate, the following account is made:

Dr. Lamb would frequently stop in the Sociedad's main office downtown to discuss something with Mr. Illingworth. Dr. Sarmiento's office is in this building as well as the BSFG's primary school. On every visit, Dr. Lamb would walk through the halls and drop into the classrooms.

They were always in chaos! The teachers would be sitting up front at their desks working or talking with 2 or 3 students while the rest of the students would be chasing, throwing paper and or just fooling around. This would go on everyday, in every class for the whole school day.

One morning Dr. Lamb and Sarmiento were talking about various aspects of education in Ecuador. Dr. Lamb asked Dr. Sarmiento to walk with him to visit classes. He did. When they finished their tour, Dr. Lamb asked Dr. Sarmiento. "Do you believe that what is going on in those classroom represents good instruction?" His response was: "Well, we have to follow the official curriculum of the Ministry of Education." Dr. Lamb asked the question a second time. Dr. Sarmiento's response was, "The person who would best judge this is the classroom teacher."

Unfortunately, it is our opinion that unless Dr. Sarmiento were to do a complete turn around and become interested and involved in the day-to-day operations of this project, it is doubtful that he can be of any help to the program. To the contrary, he hurts the project, especially when he stifles the leadership potential of persons like Salazar for having too little knowledge; both about the project in particular and about education in general.

The best thing for the project and for Salazar's stature at the school is to recommend that Salazar become director and project manager.

Adriano Salazar.--a gentleman of 38 years of age trained as an industrial engineer at the local university and former graduate of the "Anzóategui" school. Mr. Salazar is a knowledgeable person in the industrial/technical training areas. His responsibility as associate director of the project has been confusing because his role as school director (principal) is blurred with Dr. Sarmiento's role as director. Salazar simply believes that he has no authority for giving directions to the project and has been totally ineffective this first year.

His contract, on the other hand, is rather clear in the matter:

El Trabajador...en calidad de Asistente del Asesor Técnico o Director Asociado de la Escuela "Anzóategui"...cumplir...[dirección de todo el personal en planificación de estudios material y comodidades para la enseñanza, preparación de materiales y equipos de instrucción; entrenamiento de profesores (incluyendo la modernización y el mejoramiento de la pericia ocupacional de cada profesor), en las diversas áreas vigentes y las que se crearon y que corresponde al funcionamiento de la Escuela en mención, siendo tales áreas en la actualidad las siguientes: Pre-artesanal. Ebanistería, Tipografía-Linotipo, Mécanica, Radiotécnica-Televisión, Offset-Fotomecánica, Automotriz y Tornería].

Believing that Salazar has much potential for eventually leading the school, the Evaluation Team is recommending that he be given full administrative authority at the school level for all educational activities; that he report directly to

Mr. Illingworth on Project matters and assume the title of Project Manager. We believe that the success of the project depends greatly on his ability to (a) get some degree of administrative training and (b) receive more authority from Mr. Illingworth for project decisions.

An Analysis of the Administrative Leadership Capacity.--

the brief personal profiles presented above illustrate the serious leadership problem the project has faced during this past year. The key to this problem has been:

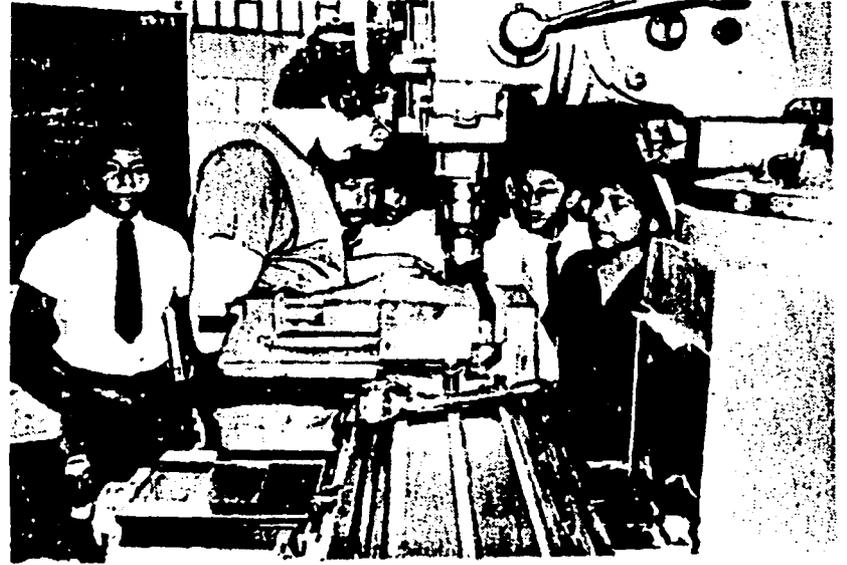
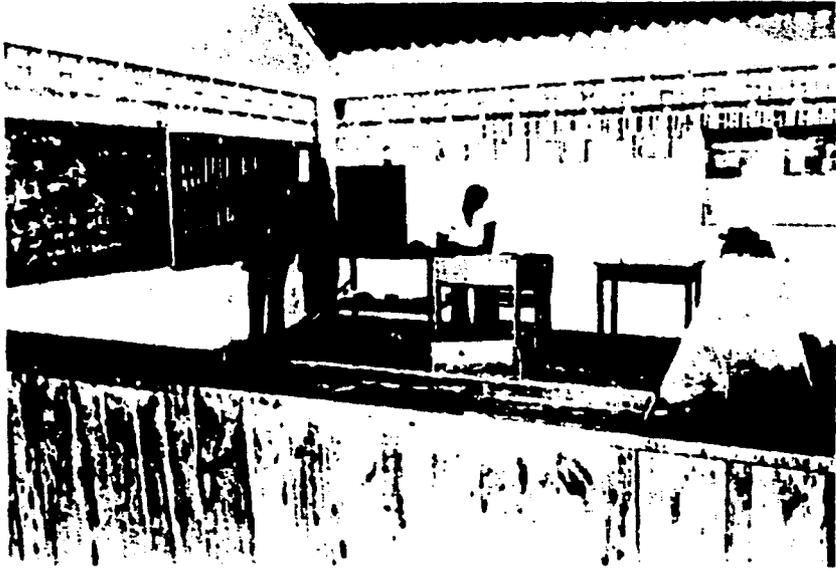
- a) A lack of communications among key figures in the process, particularly between Mr. Illingworth and the leadership at the school;
- b) The fact that Mr. Illingworth, although well intentioned, simply could not arrive at an operational level necessary to carry through with decisions regarding program development requirements to the degree required in the first year plan of operation;
- c) The inability of the technical advisor, Mr. Lundy, to effectively advise and give direction to the project in the manner intended by Mr. Olivo;
- d) The seemingly confusing role and relationship to the project that Dr. Sarmiento has; his influence emerges at critical decision points in the chronology of the project, but in the response to who is responsible for what and when, his involvement is less clear and quite illusive;
- e) There is no indication that good management procedures have been established by any of the key project leaders, thus the administrative historiology of the first year's program of activities is blurry, confusing and inadequate.

During the course of this evaluation each of these items was carefully discussed among the persons involved. Three major agreements were agreed upon which should alleviate some of the above problems:

- 1) The proposed organization would remove Dr. Sarmiento from a decision making responsibility at the project program level and put Ing. Solórzano into the project manager's role with more direct responsibility for managing the everyday operations of the project
- 2) As a result of much work and many hours of study and analysis, the project leadership worked out and agreed to utilize a Systematic Program Implementation Plan which should help considerably in giving direction and control over future project activities
- 3) In a less direct way, but with no less meaningful relationship to the project, the members of the project staff - from Mr. Illingworth down to Mr. Solorzano - were given intensive training in how to plan and carry out an interactive project leadership meeting. This was done throughout the two weeks of the evaluation by simply requiring that these people plan our meetings, lead discussions, and participate actively in summary evaluations (critiques) of the meetings' procedures and outcome.

With these three critical changes, therefore, the project evaluation team believes that the administrative management of the project should improve considerably. What cannot be controlled, however, are the subtle personal influences that various members of this group may impose upon the situation from this point on. For instance Mr. Lundy has simply got to give more leadership to the project and become a more effective advisor in all areas of vocational education. His salary represented one third of the project's expenditures the first

year - a rather large percentage of the project implementation costs. Mr. Illingworth has simply go to follow through with the implied and formalized commitments of BSFG. In the opinion of the evaluators, the essence of his behavior change rests in his level of commitment rather than in any super difficult task that might be beyond his capability. And, finally, gentlemen like Salazar and Solórzano must be expected to assume gradually more and more responsibility for educational leadership at the school level. A particularly important note here is that during the second year of the project, according to the new implementation plan, Salazar and Solórzano are scheduled to spend six weeks in the U.S. studying under an intensive, specialized educational administration and supervision participant training program.



Fiscal Management and Program Budgeting

The program budget prepared by Dr. Olivo and the BSFG at the beginning of the contract was pretty straightfoward with little or no room for "creative" manipulation. The total grant is for \$377.150 U.S. money to be matched with 670,000 from the BSFG and contributions made to the project by the private sector.

Essentially, the budget breaks out into three line items: salaries, training and commodities (U.S. purchases of equipment). Table 2 below shows how this money was distributed the first year.

TABLE 2  
Budget Analysis for First Year  
of BSFG Grant Project

| Budget Line Item | Amount Spent | Percentage of Costs per line item |
|------------------|--------------|-----------------------------------|
| Salaries         | 43,673       | 48%                               |
| Training         | 9,248        | 10%                               |
| Commodities      | 36,833       | 42%                               |
| Totals           |              |                                   |

Forty-eight percent went for salaries, 10 percent for training and 42 percent for commodities. These percentages are in line with the original contract. According to the

first year fiscal report, the project underspent their first year budget by about 8,500.

During the review, Mrs. Chacón from the USAID/Quito controller's office came to Guayaquil to look at the books of the BSFG. According to her end-of-visit report, the books seemed in order and she had no particular concerns regarding this matter. (See Mrs. Chacón's report in Appendix 4.)

From this analysis, two principal recommendations were suggested by Mrs. Chacón.

- a) that the private sector financial contributions should be used to complement and extend the programs underway rather than be put in the bank to earn interest;
- b) that a complete tools' inventory system be established in each workshop and kept updated on a regular basis.

Of these two recommendations, one - the utilization of private sector donations - needs careful consideration in the light of this evaluation. It was originally agreed upon by both parties of the grant that BSFG would pay the salaries of the teachers and that some \$300,000 to \$400,000 would be donated

to the project through the Chamber of Industries to match the commodity fund contributions of the OPG.

Mr. Illingworth showed the team a letter sent out by the Chamber requesting contribution from its members. (See Appendix 2.) It received two concrete responses: one from the Chamber itself for \$9,000 sucres (U.S. \$360), and one from a consortium of FADESA, IMSA, IJESA, LA LLAVE and EMPASE for \$360,000 sucres (U.S. \$13,333). (See Appendix 3.) In talking with Mr. Illingworth about these contributions, he said that they were being put into a special savings account, with no particular decision made as to how they were going to be spent.

Two basic concerns emerge from this question. First, although it shows evidence of some level of commitment on the part of the private sector, there was no indication that either Mr. Illingworth or the Chamber ever went beyond "asking for donations." In other words local industries were not invited to visit the school to see how they could contribute, and only a portion of what was originally committed was ever donated in fact. Secondly, and more importantly, there seemed to be no firm understanding or decision made as to the "matching" concept or integration of these donations directly into the grant program. This could happen in the future; it must, if

the BSFG is to meet its commitment to the intent of the Grant.

This lackadaisical attitude toward this aspect of the project--concentrated efforts to get contributions from industry and a seemingly laissez faire attitude as to how monies contributed would be utilized toward the goals the Grant supported--deserves careful analysis. In the opinion of the review team, the facts are pretty clear: the Chamber, not the BSFG, has tried to meet its commitments, although far short of the original goals; once donations were received, the BSFG did not work with the administrative leadership of the project (Lundy, Salazar) to determine how best these funds could be spent. Added to this is a related concern. Somewhere along the line Mr. Illingworth made a decision not to hire two instructional supervisors--one for the vocational areas, one for the academic areas. It is this kind of actions that bothered the team considerably. On the one hand a decision is made to alleviate two project positions in instruction that, in the opinion of the team, could have been extremely valuable to upgrade the quality of instruction in the classroom, and on the other, contributions from interested third parties that could have paid these persons' salaries are being used instead to earn 12 1/2 percent interest.

As basic program commitments for the 2nd half of the second year evolve from this evaluation, hard line decisions must be made regarding this matter. USAID has a responsibility to see to it that private sector donations made toward the efforts of this Grant are used for such purposes. Levels of commitment, letters of request, donations and the fiscal behavior of ESFG in this matter are now a de jure part of the Grant.

Cost Benefit Analysis.--The cost benefits of the program are to be found in the relationship between the improvement in instruction caused by the interventions of the Grant program--equipment, peace corps volunteers, technical assistance, etc.--and the vocational occupational skills gained by students. These skills must be transferred into employment and students must eventually raise their families' standard of living incomewise, healthwise, etc. Although the project has not had an opportunity to make a direct impact on graduates to date, it appears that the graduates of this program do get jobs, have traditionally been recruited because of their association with the school, and upon graduation flow into a viable center of economic development.

With this as a basis for the analysis of benefits, a number of "soft" conclusions can be made: (a) Given the fact that a large number of students do attend the school,

and these students are poor children who would not be in school if it were not for the free programs of the Society, we can assume that if they do receive good skills training, they will be employed (data show this to be true) and their economic conditions improved; (b) the better the program, the more students retained and graduated, the better skills attained, thus a better cost-benefit ratio; (c) it behooves everyone involved in the project - from USAID on down - to do everything he or she can do to assure that the original intent of the project as well as the goals and objectives of the Grant are met.

Cost Utility Analysis.--Cost utility can be measured by determining how effectively the money expended is being utilized. Here we have to look at how well the equipment is serving the needs of youth, how effectively the money spent for technical assistance is being utilized and how effective the interventions of the project are on improving the overall education program at the "Anzoátegui" skills training center.

The evaluation would suggest that the money spent to date is being utilized to reach the goals of the project. Poor leadership has kept the monies from being better utilized. The implementation plan developed during this review should go a long way in improving this situation.

### School-Industry Relationships

One of the basic requirements of OPG was that the BSFG, under Mr. Illingworth's direction, would establish a "Industry-Education Council" [Evaluator's title] to serve as an advisory board to the skills training programs.

Nothing in this regard has been accomplished to date. Mr. Illingworth seemed totally unaware of the real meaning of an "advisory council" and had not made any effort to get one established.

The same thing can be said for the seven advisory councils that were supposed to be formed at the program level at the school. Again, except for Mr. Lundy's observations, this component was never really incorporated in the "mind-set" of the Sociedad or Mr. Salazar.

Considerable time was given to this situation during the evaluation. Guidelines were developed for establishing a liason with industry, and the difference between "token" involvement--paper committees or letters of request-- and meaningful participation of industrial leaders, was carefully explained.

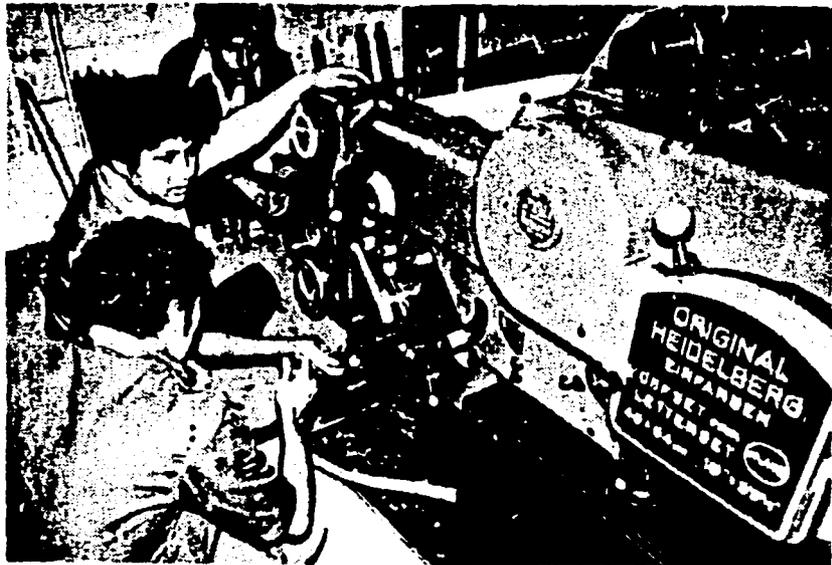
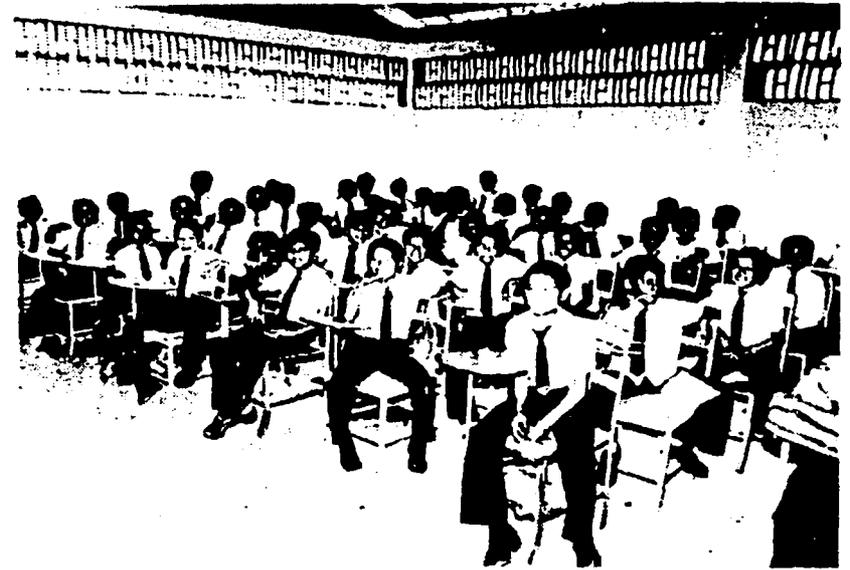
A number of personal contacts was made with leading business persons in the community to determine their level

of interest in the project. It appears as if there is considerable interest - the problem seems to lie in following through with personal contacts.

Of particular importance here is the need to work more closely with the Chamber of Industry. In both practice and principle, this would not be difficult, and it is something Mr. Illingworth could do most effectively--if he were committed to the project to the degree he says he is.

A second area of community resources that could be effectively tapped is the business and commerce areas. The consultants talked with persons like Francisco Swett former president of the National Planning Council and Carlos Julio Emanuel, president of the Central Bank, about their interest in a project like this. Both of these gentlemen have Ph.D.s from the U.S., are aware of the cultural conditions of Guayaquil and both indicated high interest, particularly in the upcoming process of developing a small business enterprise curriculum program.

USAID, through Lundy's reports, should monitor this area closely during the next six months. If serious action isn't taken to involve business and industry more integrally in the operations of the school, then there is little chance that the goals of the Project can be met.



Curriculum and Instruction ..

(Prepared by Dr. Orellana) `

-- It is very hard to involve people in active learning when the traditional style of teaching is passive.

-- Since the purposes of the academic teaching at the Anzoátegui School are to integrate curriculum materials into the Vocational Training Programs, we believe that most of the productive approach for involving teachers in instructional development is through "hands on" activities. These activities must be designed to teach new ways of using materials already available at the Anzoátegui School, and be adapted from the appropriate materials already developed at the Servicio Ecuatoriano de Capacitación Profesional (SECAP). These activities should also be designed to develop new types of teaching aids that contribute to participatory learning. We examined the possible uses of these materials at different stages (fichas to modules, etc.) of the development process; from needs assessment to planning to finding solutions. After analyzing these processes, we then turned to practical questions and solutions:

How can we write and develop meaningful curricular materials for the average student and teacher at the Anzoátegui School?

-- We reviewed some of the strategies used by other vocational training programs, especially those used by SECAP.

-- In introducing new teaching materials or techniques --

through the active learning process, it was carefully explained that the advantages and disadvantages of trying to develop curricular materials for students-teachers are a complex and developmental task. To illustrate this, we visited the headquarters of SECAP in Castro, Guayaquil where we were able to see a good curriculum development program in action. This institution not only has an outstanding skills training program unit, but it is also conducting a solid partnership with industry and the Ministries of Education and Labor.

-- We met with several specialists at SECAP who are responsible for curricular development, professional development; vocational technical instruction, materials, and visual aids.

-- We received samples of student and instructor fichas (lesson plans), their four-week modules and their 30-week lesson plans that relate to the theory of technology. After some 16 hours of comparative analysis of their international system, their materials, their professional development program, it was agreed that the Escuela Anzoátegui should adopt some of the materials and teaching systems for its teachers. Furthermore, it was decided to develop 30 modules of practical training, complete with lesson plans for students, a series of lesson guides for instructors and some 30 clusters related to theory and technology.

Specialists in curricular development will be hired by the project to help develop these materials.

Twenty sets each of these materials will be completed by January 1, 1981; 150 copies of each will be printed by the B.S.F.G. The remaining 10 sets will be completed by April 15, 1981 at a cost no higher than \$6,300.

To complement the development of these packages, a workshop is scheduled for teachers on the utilization and application of these materials. These professional development workshops will be undertaken in collaboration with SECAP and will be held the first two weeks of February, 1981.

The "Anzoátegui" school has produced hundreds of qualified artisans to assist in the process of development of Guayaquil's industrialization, eventhough it has been poorly equipped and poorly organized in the area of students services. However, it is imperative to recognize that the students who attend this school come from the poorest social economic sectors of Guayaquil and their commitment to improve their standard of living encourages them to succeed throughout these obstacles.

The school lacks organization for a student services department. Classrooms are too crowded, and in the process, students are deprived of a comprehensive educational vocational training program. We should remember that quality in the final analysis will prevail over quantity. They do not have social workers, vocational technical industrial counsellors, finan-

cial aid officers, student organizations or a library. Therefore, we would like to recommend that a Student Services Department be established with appropriate qualified and trained personnel and equipment.

The Student Services Department should become the nucleus and the umbilical cord of the school. Therefore, human resources as well as economic resources have to be invested in this area.

In many areas, the task of developing appropriate vocational training programs intersects with the very important emphasis on students' services.

Both are dependant on an accurate assessment of the problems, obstacles, resources, motivations, power structure and demographic characteristics of "The Community."

The Community represents a variety of special interests, power complexes and organizational conflicts. Thus, the establishment of an effective vocational training program depends as much on the art of development and administration as the excellence of its content. Often, innovative vocational training programs put low priority on energy expenditure for community relations, pending problems or ensuring their continued acceptance.

We believe the Anzoátegui School should improve its students' services, especially its ongoing counselling--including testing--and training program placement.

Vocational evaluation is needed through a qualified team of vocational counsellors located at the Anzoátegui School.

The testing should be designed to assess the students' present skills as a basis for determining subsequent vocational training in selected "Talleres." Testing should be done during the students' pre-artesanal year.

Integration into regular Talleres requires supplemental supportive services. Curriculum modification is an integral part of this service.

A personal adjustment program is needed involving ongoing attention to the physical, psychological, and social aspects of vocational and personal success (job relations taught by vocational counsellors). Individualized help with academic courses is needed in the major area programs (Talleres).

Job seeking and a job survival-skills program is also needed which assists students in becoming employed. Included are: reviewing resources, using application forms, writing resumés and learning proper interviewing techniques. (Practical communications taught by counselling staff).

Learning Skills Center located within the main building to provide remedial and developmental instruction in the basic academic skills.

Placement and follow-up services in cooperation with Industry.

By developing and designing the students flowchart (Fig. 4 ) we assisted Ing. Salazar and Ing. Solórzano to enhance their students services procedures in an organized manner. A short "learning by doing" in-service program was organized during the evaluation process to teach the advantages and disadvantages of the approach described in this flowchart.

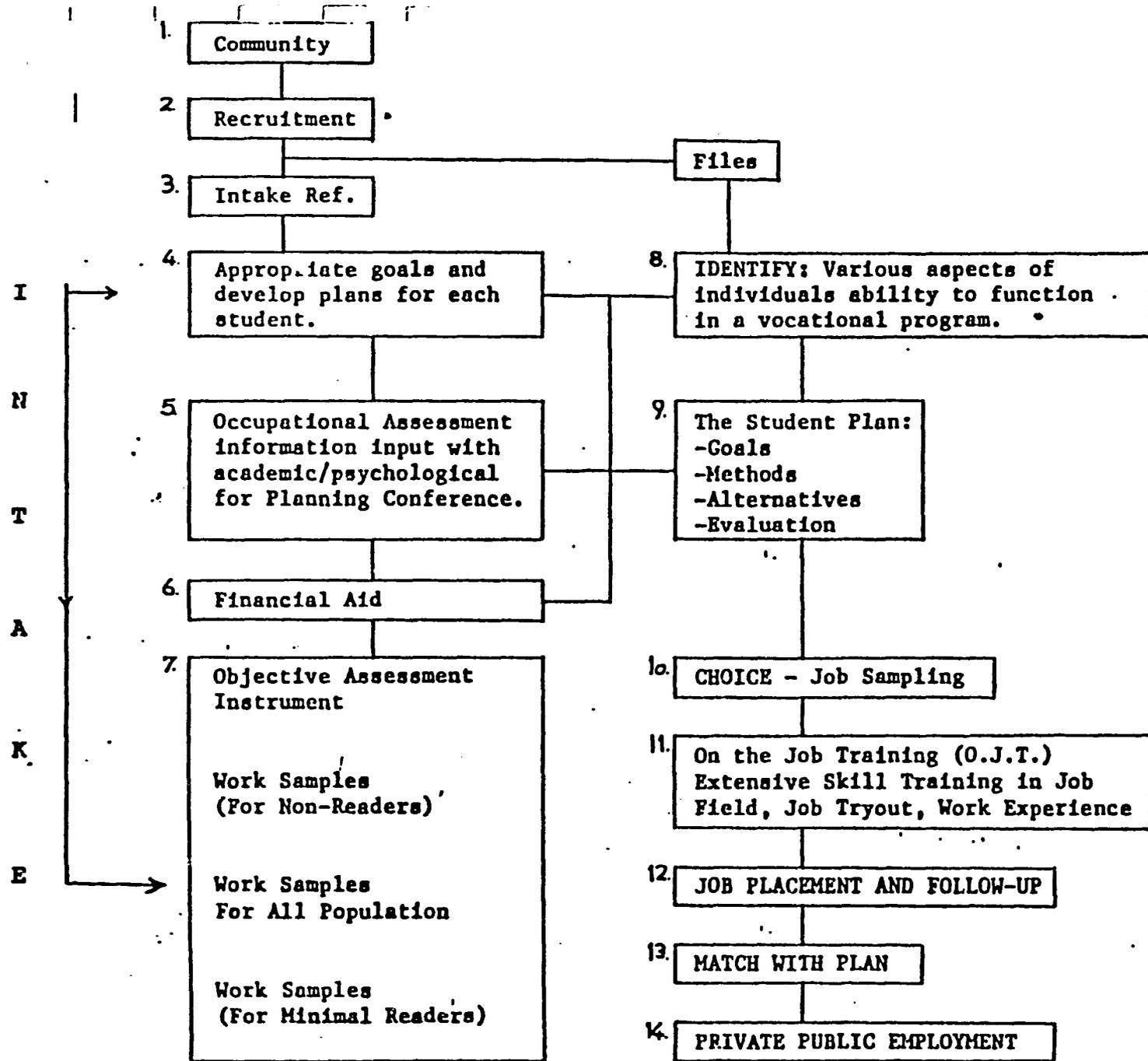


Fig. 4 Suggested steps to improve student's services at "Anzoátegui"

86

## Staff Development

Staff Development is a crucial component of any successful vocational-technical training program.

On-going activities such as staff meetings, seminars, and workshops must be integrated into the instructional program to assist teachers and administrators, and to enhance cooperation, communication and improve instructional services.

Well-planned staff development activities prepare teachers and trainers to more effectively impart their knowledge and skills to their students. Good staff development activities also enable teachers to better transfer skills from the world of work responsibly and self-confidently to their instructional activities in the classroom.

Since the capacity to transfer is one of the most powerful abilities a person can possess, it is imperative that teachers facilitate this process of learning according to the students' individual needs.

Implication for the BSFG:

Through a comprehensive staff development program, the teachers and administrators at Anzoátegui could have possibly minimized the horrendously high drop-out rate of students, and improved student achievement throughout the school.

Specifically, teachers should work on the following areas:

Instructional methods and materials

Curriculum planning

Motivation and Counselling techniques

Problem solving techniques

Statistics show a very high drop-out rate for the first and second year students and the pre-vocational students, indicating a great need for instructional improvement and increased communication among students, teachers and administrators. (See Tables 2-3 and fig. )

Also, the initiation of an effective counselling service is needed at the Escuela Anzoátegui de Artes y Oficios to try to help find ways to help students with special needs and those on academic probation.

Two dimensions of staff development are: Role identification and job enrichment. Personnel would have a much better working relationship with administrators and higher morale if they were allowed more participation in the development of curriculum and given more opportunities to share new ideas and teaching techniques.

### Student Services

As it is, the program lacks counselling services and training in a technically and socially appropriate way. So far the program has not provided appropriate vocational career counselling services to students at the pre-artesanal level. Most of

these students do not pass the general academic courses. They waste much valuable time just visiting the different shops, creating in the process, congested shop facilities which cannot accommodate the regular students in the first place. This career exploration phase could conceivably be cut down to ten weeks. The pre-artesanal students do not receive any organized counselling services related to their career choices. Consequently, many students end up selecting the wrong occupational training course and do poorly from them on.

Shop teachers do not understand the advantages of having a pre-vocational component. Students are being asked to give 360 hours per year to visit shops and another 720 hours to cultural courses such as geography, history and mathematics.

In the process of collecting data to assist in our evaluation process, we administered a Delphi survey to 24 teachers who represented 75% of the teaching staff of the School.

Teachers were asked to respond to questions concerning students' work habits, attitudes and knowledges in relationship to respective trades or occupations. (In Surveys 1 and 2, and in Appendix VII).

To analyze these data, we used the Lackert Scale to

obtain percentages of opinions to each item asked.

We collected data on 250 students, representing 50 per cent of the student population in the school. The survey was administered to each teacher individually. We were not able to analyse all the potential descriptors. Therefore, we decided to analyse only the written opinions of teachers. (See for example Table I)

We must point out several limitations of this study:

- Teachers are not used to answering these kinds of questionnaires.
- Some teachers felt that the study was an invasion of their academic freedom.
- Some felt it was too personal and too demanding on their time.
- A few of the teachers did not understand why we needed such data.
- The implications of the empirical analysis should be taken as a partial tool for planning and improvement of what now exists and what could exist in the near future.

To illustrate our analysis, we are sharing with the readers some of the responses from the teachers:

1. Do the students have an adequate knowledge related to job security?

Sixty percent of the teachers responded that students

don't have such a knowledge; only 10 percent of the teachers said knowledge of job security was important.

2. Are students responsible for being on time and for informing them they cannot make it to their shop?

Forty-eight percent of the teachers responded that students are not regularly on time, because, "Being late is part of the culture." Fifty-two percent of the teachers responded that being punctual is a good working habit.

3. Do the students work cooperatively together?

Fifty-two percent of the teachers responded yes, students do work cooperatively.

4. Should teachers prepare monthly reports on students?

Fifty-eight of the teachers responded negatively. One teacher said, "Of course not! We do not have time to engage ourselves in all that paper work demands."

5. Do students make appropriate judgements and decision?

Forty-two percent of the teachers responded that their students are not allowed to make independent, individual decisions because that was the reason why instructors were there; sixty percent of the teachers responded that we have

to develop this practice among students and teachers to prepare independent men.

6. Do students work effectively without direct supervision?

Thirty-eight percent of the teachers responded that students could not work without direct supervision; thirty percent of the teachers responded that students were able to work individually and without supervision; fourteen percent responded that their students were able to work independently and effectively without direct supervision.

7. Do students have a positive attitude towards their jobs?

Thirty percent of the teachers responded negatively, thirty-six responded that their students were not self assertive because of the socio-economic environment that doesn't permit them to develop these personal characteristics to their potential.

8. Do students know what skills and knowledges are needed to acquire and improve their work?

Sixty-eight percent of the teachers responded that students were not aware of these skills; thirty-two percent responded that students were partially informed of such skills; eighteen percent responded positively.

Surprisingly, eighty-two percent of the teachers said they

would not hire their own graduates. Apparently, they either did not understand the question, or simply are not confident that they have trained their students properly. A dangerous implication of this attitude arises when the graduates apply for local industry jobs. Industrialists always inquire about the applicant's prior training performances. If these data are right, some of these teachers would not recommend their students.

The teachers did make invaluable recommendations for improving the teaching and learning of the Escuela de Artes y Oficios Anzoátegui. Surveys 1 and 2.

- To purchase better equipment
- To have less students per section; both in the talleres and in the classrooms.
- To be more selective in referring students to first year talleres.
- To organize a comprehensive library
- To improve ventilation in their respective shops
- To improve sanitary facilities
- To organize safety courses
- To allow teachers and instructors official time to prepare lessons and grade papers.

Teachers were asked: "Would you attend and participate in professional development programs to improve your teaching skills without pay? How long?"

Eighty-five percent of them showed readiness to attend training programs such as conferences and seminars for approximately 2 1/2 hours per day, without pay!

TABLE 4

Item  
Survey Analysis

Teachers' Responses

N°50

Area & Question N°

|                             | TOTAL | N  | 1 | 2  | 3  | 4  | 5 | Omit |
|-----------------------------|-------|----|---|----|----|----|---|------|
| <u>Safety</u>               |       |    |   |    |    |    |   |      |
| 2                           | 50    | 26 | 0 | 10 | 8  | 6  | 0 | 0    |
| <u>Responsible</u>          |       |    |   |    |    |    |   |      |
| 5                           | 50    | 23 | 1 | 3  | 14 | 6  | 3 | 0    |
| 7                           |       | 21 | 3 | 4  | 13 | 9  | 0 | 0    |
| 12                          |       | 22 | 5 | 7  | 7  | 5  | 3 | 0    |
| 17                          |       | 19 | 4 | 5  | 15 | 7  | 0 | 0    |
| <u>Punctuality</u>          |       |    |   |    |    |    |   |      |
| 4                           | 50    | 8  | 0 | 2  | 14 | 26 | 0 | 0    |
| <u>Generalize Knowledge</u> |       |    |   |    |    |    |   |      |
| 15                          | 50    | 20 | 1 | 3  | 6  | 15 | 5 | 0    |
| 18                          | 50    | 21 | 2 | 2  | 9  | 12 | 3 | 1    |
| 1.                          | 50    | 25 | 0 | 0  | 15 | 8  | 0 | 2    |
| 19                          | 50    | 23 | 6 | 6  | 8  | 3  | 3 | 1    |
| <u>Human Relations</u>      |       |    |   |    |    |    |   |      |
| 10                          | 50    | 13 | 2 | 5  | 15 | 10 | 2 | 3    |
| 11                          | 50    | 17 | 5 | 6  | 14 | 6  | 2 | 1    |
| 13                          | 50    | 16 | 2 | 6  | 18 | 7  | 0 | 0    |
| <u>Selfesteem</u>           |       |    |   |    |    |    |   |      |
| 14                          | 50    | 19 | 3 | 4  | 17 | 7  | 1 | 0    |
| 8                           | 50    | 20 | 5 | 3  | 10 | 11 | 1 | 0    |
| 9                           | 50    | 13 | 4 | 4  | 14 | 12 | 3 | 0    |

67

TABLE 5

Student Enrollment Statistics of  
La Escuela de Artes y Oficios "Anzoátegui" BSFG

1979 - 1980

| <u>Shops</u>              | <u>Enrollment</u> | <u>Drop-outs</u> | <u>Failed</u> | <u>Below*<br/>45 pts.</u> | <u>Academic**<br/>Probation</u> | <u>Passed</u> | <u>Graduated</u> | <u>Total</u> |
|---------------------------|-------------------|------------------|---------------|---------------------------|---------------------------------|---------------|------------------|--------------|
| General<br>Mechanics      | 1st year          | 18               | 3             | 8                         | 5                               | 2             | 0                | 18           |
|                           | 2nd year          | 13               | 4             | 1                         | 5                               | 3             | 0                | 13           |
|                           | 3rd               | 8                | 2             | 1                         | 1                               | 0             | 4                | 8            |
|                           | 4th               | 13               | 1             | 0                         | 0                               | 0             | 12               | 12           |
| Carpentry/wood-<br>crafts | 1st year          | 8                | 1             | 0                         | 0                               | 2             | 5                | 8            |
|                           | 2nd               | 2                | 2             | 0                         | 0                               | 0             | 0                | 2            |
|                           | 3rd               | 7                | 1             | 2                         | 0                               | 0             | 4                | 4            |
| Offset                    | 1st year          | 20               | 12            | 0                         | 4                               | 3             | 1                | 20           |
|                           | 2nd               | 3                | 1             | 0                         | 0                               | 2             | 0                | 3            |
|                           | 3rd               | 5                | 1             | 0                         | 0                               | 1             | 4                | 4            |
| Radio and TV              | 1st year          | 16               | 1             | 3                         | 6                               | 3             | 3                | 10           |
|                           | 2nd               | 9                | 2             | 2                         | 1                               | 5             | 1                | 9            |
|                           | 3rd               | 17               | 2             | 1                         | 3                               | 6             | 5                | 5            |
| Automechanics             | 1st year          | 45               | 6             | 3                         | 15                              | 7             | 14               | 45           |
|                           | 2nd               | 26               | 1             | 2                         | 12                              | 6             | 5                | 26           |
|                           | 3rd               | 28               | 4             | 0                         | 10                              | 0             | 14               | 14           |
| Leatherworking            | 1st year          | 24               | 2             | 6                         | 4                               | 7             | 5                | 24           |
|                           | 2nd               | 7                | 0             | 0                         | 2                               | 4             | 1                | 7            |
|                           | 3rd               | 5                | 0             | 0                         | 0                               | 0             | 5                | 5            |
| Typography                | 1st year          | 10               | 5             | 1                         | 1                               | 3             | 0                | 10           |
|                           | 2nd               | 13               | 2             | 2                         | 1                               | 6             | 2                | 13           |
|                           | 3rd               | 7                | 1             | 0                         | 0                               | 0             | 6                | 6            |
| Totals                    | 304               | 54               | 30            | 70                        | 59                              | 91            | 50               | 304          |

\* These students will be allowed final examination on April.

\*\* These students will be allowed another examination

Table 5 / continuation

|                           | <u>Enrolled</u> | <u>Drop-outs</u> | <u>Failed</u> | <u>Below*<br/>45 pts.</u> | <u>Academic**<br/>Probation</u> | <u>Passed</u> | <u>Graduated</u> | <u>Total</u> |
|---------------------------|-----------------|------------------|---------------|---------------------------|---------------------------------|---------------|------------------|--------------|
| Pre-vocational            |                 |                  |               |                           |                                 |               |                  |              |
| 1st section               | 70              | 3                | 12            | 30                        | 18                              | 3             |                  | 70           |
| 2nd section               | <u>73</u>       | <u>19</u>        | <u>8</u>      | <u>31</u>                 | <u>13</u>                       | <u>2</u>      |                  | <u>73</u>    |
| Total                     | 143             | 26               | 20            | 61                        | 31                              | 5             |                  | 143          |
| <u>Summary</u>            |                 |                  |               |                           |                                 |               |                  |              |
| Gen. Mechanics            | 52              | 10               | 10            | 11                        | 5                               | 16            | 12               | 52           |
| Woodworks                 | 17              | 4                | 2             | 0                         | 2                               | 9             | 4                | 17           |
| Offset                    | 28              | 14               | 0             | 4                         | 5                               | 5             | 4                | 28           |
| Tadio and TV              | 42              | 5                | 4             | 10                        | 14                              | 9             | 5                | 42           |
| Automechanics             | 99              | 11               | 5             | 37                        | 13                              | 33            | 14               | 99           |
| Leatherworks              | 36              | 2                | 6             | 6                         | 11                              | 11            | 5                | 36           |
| Typography                | <u>30</u>       | <u>8</u>         | <u>3</u>      | <u>2</u>                  | <u>9</u>                        | <u>8</u>      | <u>6</u>         | <u>30</u>    |
| Sub-total                 | 304             | 54               | 30            | 70                        | 59                              | 91            | 50               | 304          |
| Pre-vocational<br>1 and 2 | <u>143</u>      | <u>26</u>        | <u>20</u>     | <u>61</u>                 | <u>31</u>                       | <u>5</u>      |                  | <u>143</u>   |
| Total General             | 447             | 80               | 50            | 131                       | 90                              | 96            | 50               | 447          |

\* These students will be allowed final examination on April.

\*\* These students will be allowed another examination.

Table 5 - continuation

How many graduated from you institution in the last five years?

|      | <u>Male</u> | <u>Female</u> | <u>Total</u> | <u>Graduates</u> |
|------|-------------|---------------|--------------|------------------|
| 1973 |             | NONE          | 764 + 257    | 157              |
| 1974 |             |               | 528 + 153    | 140              |
| 1975 |             |               | 453 + 151    | 113              |
| 1976 |             |               | 375 + 141    | 76               |
| 1977 |             |               | 344 + 140    | 66               |
| 1978 |             |               | 282 + 127    | 44               |
| 1979 |             |               | 304 + 143    | 63               |

In which disciplines did students receive diplomas?  
How many in each field?

Radio and Television  
General Mechanics  
Metal Mechanics  
Carpentry  
Auto Mechanics  
Printing  
Offset

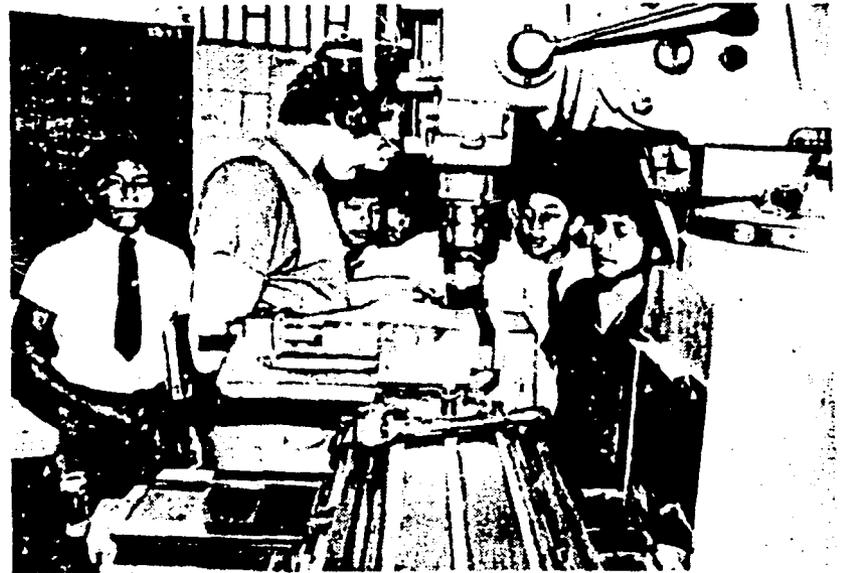
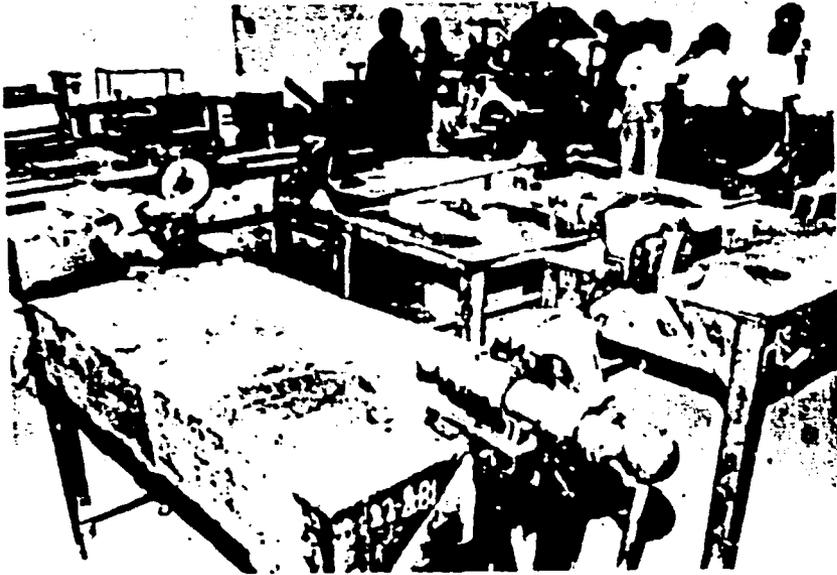
## Equipment

"Give me the proper tools, and I will teach .  
Teach me with proper tools and I will learn. .

Walt Disney

The Anzoátegui School has been a pioneering vocational technical education for over one hundred years, utilizing old equipment, tools and techniques. The tools and equipment it has, were given to the School, wherever modern technology and/or industrialization made it imperative for a factory or industry to modernize equipment, tools and techniques.

To improve this situation, several leaders of greater Guayaquil developed a comprehensive vocational training program and presented it to the USAID Mission in Quito for funding. Fortunately for Escuela "Anzoátegui," the program was funded, and in its first year approximately \$36,000 was invested in purchasing a portion of the needed equipment to modernize the Anzoátegui's shops. Now, teachers and students have a much better atmosphere in which to learn to teach. The Evaluation Team and the school's administrators developed a plan to equip the shops with appropriate tools and equipment during the second year, in the amount of \$76,000. We would like to also mention the fact that the Counselling Department will be equipped with appropriate counselling tools. A listing of tools and equipment purchased the first year of the Project is attached in Appendix VII.



Project Assessment Based On  
Program Achievement

(Prepared by Dr. Lamb)

This section of the evaluation report deals specifically with the goals, objectives and conditions to be achieved at the end of the project that were established under the contract agreement. In this analysis, attention has been given only to the written indicators of program achievement as agreed upon by USAID and the Filantrópica Society.

A further means of qualifying these goals has been the attempt to clarify key factors - facilitative and constraining - that were identified to have affected the implementation.

The data for this analysis is presented throughout Table 3 which follows: the statements relative to facilitative and/or constraining factors serve as narrative comments regarding the data and provide the essential analysis for the project assessment based upon program achievement.

TABLE 3

COMPREHENSIVE PROGRAM ACHIEVEMENT CHART

**General Purpose:** To provide realistic training for a vocation for 862 youth annually from among severely disadvantaged poor families. The training will develop marketable skills for immediate gainful industrial employment and is designed to raise the families of these youth out of poverty and other disadvantagement.

| Goals/Conditions and Objectives  | Level of Achievement<br>High    Low | Implementation factors that effected the level of accomplishment of the proposed objectives.  |  |
|--|-------------------------------------|---|--|
|  |                                     | Facilitative  | Constraining   |
| <p>1. To develop a functional orientation, guidance, counselling, and referral capability to schedule 262 youth annually into grade 7<sup>o</sup> and, upon completion of this year of occupational orientation and exploration, to schedule each into a curriculum appropriate to the needs and capabilities of that individual.</p>  | 5 4 3 ② 1                           | <p>Hired a program coordinator who tried to accomplish the pre-vocational orientation component of this goal...Seems to be an understanding among key figure regarding importance of goal... Project staff have developed good second year plan to achieve this goal, given this continuation of project.</p> | <p>Coordinator did not have conceptual experiential understanding of program to meet the goal...Too heavy an emphasis on academics due to traditional influence...Traditional thinking toward this grade has been to screen out their high percentage of students rather than toward accommodating them and helping them select vocational career patterns</p> |
| <p>2. To extend the above services to develop the ability to provide job placement services to the (a) 184 graduates, (b) 50% (at least) of the drop outs, (c) an additional 180 youth in the school-industry cooperative work experience part of instruction (3<sup>o</sup> and 4<sup>o</sup> years), and (d) the estimated 520 youth who will work part-time after school hours.</p> | 5 4 3 ② 1                           | <p>Staff sees the need to emphasize job placement as a criterion for success...Traditionally "Anzoátegui" students have been considered well trained in comparison to public secondary students... The potential demand for skilled trained youth in Guayaquil is high.</p>                                   | <p>No formal school industry coordinators were hired...Very poor system for following up graduates...No program exists for students who drop out...School industry council was not initiated..</p>   |

fb

TABLE 3 (CONTINUED)

| Goals/Conditions and Objectives   | Level of Achievement<br>High Low | Implementation factors that effected the level of accomplishment of the proposed objectives   |  |
|---|----------------------------------|---|--|
|   |                                  | Facilitative  | Constraining   |
| <p>3. To start in a modest way with 18 students, who are interested and have the potential to follow through, to provide training and other support in establishing small business enterprises. Based on experience at the end of the project, the number served will be increased by additional program offerings in the practical organization and management of a small business.</p>  | 5 4 3 2 ①                        | <p>Project staff understand the meaning of implications of this goal and are beginning to deal with the problem...Evaluation team found strong interest in the private sector particularly Central Bank regarding this component and encouraged these supporters to work with staff toward program development.</p> | <p>Lack of leadership and curriculum development skills in this area.</p>  |
| <p>4. To raise the quality of instruction by developing teacher and supervisory and administrative capabilities to implement updated curricula, methodology, instructional materials, measurement of student achievement, and other changes in the school's program and services. For the 862 enrollees this means accelerated instruction at a higher quality level and a lengthened instructional day (six clock hours) and school day (from 30 to 35 weeks).</p> | 5 4 ③ 2 1                        | <p>Staff has taken advantage of the human resources at SECAP, an exceptionally fine German-run vocational school, and have utilized these people in the past and plan to use them in the future for staff development purposes.</p>   | <p>Seems to be a lack of enthusiasm and support, to some degree, from the teachers for extra time required for in services trng... Leadership has not followed through with workshop content to assist teachers in improving their instructional effectiveness.</p>  |
| <p>5. To develop curriculum and instructional materials that are not available but are vitally needed in the teaching-learning process in the seven departments for the five major training program from grade 7<sup>th</sup> through 1<sup>st</sup>; 2<sup>nd</sup>; 3<sup>rd</sup> and 4<sup>th</sup>. These materials relate to the 16 different occupational clusters for which training is provided.</p>   | 5 4 3 2 ①                        | <p>Staff sees the need for this goal and has planned to spend money and time toward its achievement in the second year...Local resources exist to help them develop these materials and the teachers at the school realize they need them.</p>  | <p>Project leadership will not be able to organize and administer a comprehensive materials development program without obtaining resources of a good instructional material specialists...Not enough attention has been given to the 16 different occupational clusters concept because no manpower development needs study was undertaken.</p> |



TABLE 3 (CONTINUED)

| Goals/Conditions and Objectives  | Level of Achievement<br>High      Low | Implementation factors that effected the level of accomplishment of the proposed objectives                 |   |
|--|---------------------------------------|---|---|
|  |                                       | Facilitative  | Constraining  |
| <p>c) Two additional trimesters of advanced work experience in industry in the fourth year (4<sup>o</sup>) for graphic arts and machine and metal trades options will lead to higher level employment opportunities for 24 of the 160 graduates.</p>   | 5 4 3 2 ①                             | See Goal 2 above  |   |
| <p>d) Essential student and teacher instructional materials will be developed, reproduced and used to increase the effectiveness and efficiency of the whole teaching and learning program. These relate to non-commercial teaching course outlines, teaching plans, students instruction sheets, etc. These will developed for each of the seven departments (curricula ) for each grade level (7<sup>o</sup> and 1; 2; 3<sup>o</sup> and for two departments).</p> | 5 4 3 ② 1                             | See Goal 5 above  |   |
| <p>e) Adequate instructional supplies (wood, metal, electric/electronic, printing, building-materials, etc.) will be provided in adequate quantities to permit the development of marketable skills for 862 students who are expected to be enrolled in the total vocational program.</p>  | 5 4 3 ② 1                             | See Goal 5 above  |   |
| <p>2. Specific systems to be operational due to the OPG Grant.</p>   | 5 4 3 ② 1                             | Project director sees need to spend money for project related activities if although sometimes reluctantly. | Difficult to measure commitment level beyond term of project, particularly as it relates to maintenance and operational expenditures. |

TABLE 3 (CONTINUED)

| Goals/Conditions and Objectives   | Level of Achievement<br>High      Low | Implementation factors that effected the level of accomplishment of the proposed objectives  |  |
|---|---------------------------------------|--|--|
|   |                                       | Facilitative   | Constraining   |
| <p>a) A uniquely effective initial year of training geared solely to orientation, exploration, guidance and career counselling with hands-on experiences. The system embraces continuing counselling for 192 students at the second year and services at the third and fourth years (for another 184 students) that are coupled with the industrial on-the-job cooperative work experiences. Job referral and placement for the 184 annual graduates and additional drop-outs are integral parts of the system.</p> | 5 4 3 ② 1                             | See Goal 2 above   |  |
| <p>b) Labor market studies and analyses in the five major training programs and 16 occupational clusters as foundational to the planning of all instruction and learning. Further application of this information will be reflected in the changed curriculums which will place greater emphasis on skill development, essential technology, related vocational subjects and technical communications competence.</p>   | 5 4 3 2 ①<br><br>/                    | Project staff understands the need for such analysis and is willing to work with a subcontract research team to achieve this goal.             | Project leadership may not be able to carry out the necessary administrative procedures for (a) letting a contract (b) utilizing the data once received for curriculum change (c) continuing the analysis in a systematic and integrated manner. |
| <p>c) An instructional program, with equipment, accesories, etc., which simulates that of industry. Sufficient numbers of operable training stations to more effectively develop marketable skills at higher levels numbers of students hereinbefore identified.</p>  | 5 4 3 ② 1                             | Project plan and support money are designed to work toward this goal.. Project leadership has good understanding of school needs in this area. | Given the age and condition of much of the equipment already installed in the school this goal may be too much to ask to accomplish in a 3 year period...Some equipment is just not available at the prices necessary for this goal.             |

86

TABLE 3 (CONTINUED)

| Goals/Conditions and Objectives  | Level of Achievement<br>High Low | Implementation factors that effected the level of accomplishment of the proposed objectives        |  |
|--|----------------------------------|--|--|
|  |                                  | Facilitative   | Constraining   |
| d) Teaching staff upgraded in skill and technology, and updated in teaching methodology. The staff will grow during the project from the full-time equipment of 22 teachers to over 60. The development of the administrative and supervisory seven (chiefs) leadership personnel. | 5 4 3 (2) 1                      | See Goal 4 above   | Mr. Illingworth has been slow and resistant to hiring more teachers and to establish departmental level supervisory staff. |
| e) A curriculum and instructional materials development capability to continue to prepare essential teacher and student materials to enhance the quality of instruction.   | 5 4 3 (2) 1                      | See Goal 5 above   |  |
| f) A modest, functional technical library of student and teacher resource materials that will form a required part of the instructional program.   | 5 4 (3) 2 1                      | Genuine interest on the part of the staff and leadership in this area...Local resources available. | May not be enough money to do much...Facilities are not set up to make maximum use of a learning resource center.          |
| Objectives   |                                  |  |  |
| a. First year - 1979   |                                  |  |  |
| - The project requires the employment of 10 additional full-time teachers.   | 5 4 3 (2) 1                      |  | Mr. Illingworth resistant to hiring large numbers of new staff...Pay scale is low for good teachers in this area.          |
| - The project will require appointment of an associate director, a chief of the preparatory guidance year, and a chief for a new first year of basic core training as local hires.   | 5 (4) 3 2 1                      |  | At the present time Mr. Illingworth does not see a need for a chief of the basic core training program.                    |

TABLE 3 (CONTINUED)

| Goals/Conditions and Objectives   | Level of Achievement<br>High Low | Implementation factors that effected the level of accomplishment of the proposed objectives  |   |
|---|----------------------------------|--|---|
|   |                                  | Facilitative   | Constraining  |
| <p>- The local hire associate director will be assisted by external specialists in developing this staff and in providing supervision in the performance of all duties essential to establishing a functional institution of a high quality and productivity.</p>   | 5 4 ③ 2 1                        | <p>TA and Associate director get along well...Associate Director seems highly motivated and well qualified.</p>  | <p>Some questions regarding capability of TA to provide expert assistance in all the duties essential to establishing a program of this nature.</p>   |
| <p>- An experienced vocational industrial education administrator, (foreign technical assistance) with additional expertise in curriculum and instructional materials development and industrial teacher training, will be appointed to serve as the key leadership person for the duration of the project. Services of other volunteers will be solicited to assist in developing the teacher and all curriculum and instructional resource materials.</p> | 5 4 ③ 2 1                        | <p>The TA is perceived by Ecuadorian staff to be the advisor to the project and there seem to be no serious personal problems in this regards... Three Peace Corps volunteers have been secured and are doing exceptionally fine teaching.</p> | <p>TA has not been effective in providing strong leadership to the project thus far...Some question regarding the level of commitment toward accepting advise on part of traditionalists.</p> |
| <p>- The local hire associate director under guidance and training of the external administrative leader will serve to coordinate all school-related activities of the 69 teachers and supervisors. However, all staff persons are accountable to the Principal under whose direction and control the school is administered.</p>   | 5 4 ③ 2 1                        | <p>Associate director seems to have the support of teachers and directorate...Associate Director has engineering degree and strong commitment to program.</p>  | <p>AD lacks training in educational leadership and the recognized authority (on the part of the teachers) for coordination responsibility of all school related activities.</p>               |

100

TABLE 3 (CONTINUED)

| Goals/Conditions and Objectives   | Level of Achievement<br>High      Low | Implementation factors that effected the level of accomplishment of the proposed objectives             |  |
|---|---------------------------------------|---|--|
|   |                                       | Facilitative  | Constraining   |
| <p>- Specifications will be prepared for commodities like audio-visual aids and devices; educational technology apparatus; equipment; library resource material; etc., needed for grade 7°. Awards will be made and an estimated 75% will be delivered and installed. Local funds will be used together with limited amounts from this OPG.</p> | 5 4 (3) 2 1                           | Good intentions and follow through on part of school level staff toward this need.                      | Directorate has not spent either donation monies or society monies for commodities.  |
| <p>- The Sociedad has always had a Treasurer to manage its fiscal affairs within the policies established by its Board.</p>   | 5 (4) 3 2 1                           |   | Treasurer does not seem to be highly interested in the project and has never visited the school to the best of the knowledge of the school level staff.                                  |
| <p>- Similarly, the Sociedad's President serves as the administrative head. The school Principal is accountable to the Board through the President for the administration and management of the program and services.</p>   | 5 4 (3) 2 1                           | Society seems amenable to Administrative organization change as recommended in organizational analysis. | Tradition has given principal (Dr. Sarmiento) authority and control over "Anzoátegui" program how well he can step out of this scene, administratively, needs to be carefully monitored. |
| <p>- Disbursement and procurement procedures, which the Sociedad has followed, will be modified if necessary, to meet USAID requirements for systems of control and records. As related to the OPG, a separate accounting system, conforming to USAID regulations and auditing procedures will be established.</p>                              | 5 4 (3) 2 1                           | Disbursement and procurement procedure seem adequate.   | Project fiscal management staff and directorate have not established (implemented) the "like contributions and/or private sector donations" operational mentality to date.               |

101

TABLE 3 (CONTINUED)

| Goals/Conditions and Objectives   | Level of Achievement<br>High Low | Implementation factors that effected the level of accomplishment of the proposed objectives |   |
|---|----------------------------------|---|---|
|   |                                  | Facilitative  | Constraining  |
| - Curriculum outlines for all courses in the 7 <sup>o</sup> guidance cycle and the common case of related subjects will be prepared for teacher use.  | 5 4 3 ② 1                        | See Goal 1 above  |   |
| - Supplemental student resource materials will be developed.  | 5 4 3 ② 1                        | -----   |   |
| - Technical library materials and commodities (also one-third) will be ordered and installed.   | 5 4 3 ② 1                        | Money is available for this activity.   | Staff needs to develop high criteria for materials acquisition. |
| - Appendix A includes a phase chart which identifies other major categories of activities to implement the project. These include developmental and continuing operational periods with proposed time schedules. Foreign technical assistance will be utilized to develop leadership and training capabilities in counterpart personnel. The proposed administrative, supervisory and instructional staff for implementing the project are continued in the Sociedad's long-term plans. | 5 4 3 ② 1<br><br>1               | See Sections 1 and 2 of this report.  |   |

102

## CONCLUSIONS AND RECOMMENDATIONS

From the preceeding material, the evaluation team was able to come to the following conclusions regarding the "Anzoátegui" skills training project:

- a) That the original intent and design of the project was very well conceived both on the basis of what was needed in Guayaquil and on the basis of what worldwide leaders in educational development planning say about the needs of disadvantaged youth such as served under this project;
- b) That given all considerations, the general thrust of the project thus far is moving - albeit slowly and sometimes relentlessly - toward the original purposes of the grant; this is important because it gives validity to the work thus far and authenticity to the decisions that have been made by those persons integrally involved in the project;
- c) Not all of the first year goals have been met, particularly those that have required leadership from key administrative leaders and/or complex implementation strategies. However, we can also conclude that the failure to achieve complex goals is related, more to administrative organizational aspects than to any intent to deviate from the original goals of the project;
- d) That major organizational and administrative/management procedural changes are necessary immediately if the project is ever going to come close to reaching its original goals;
- e) That better fiscal integration of project monies with private donation monies must evolve if the original intent of the project regarding matching contributions is to be realized

- f) That one of the basic constraints thus far in the successful accomplishment of a good number of the program goals rests with the inability of Mr. Illingworth to have formalized an industry education council as prescribed in the grant contract. This level of involvement is necessary if the project wishes to improve its decision making and graduate-follow-through activities in a manner that they should be improved.
- g) That the project does not have a well-planned staff development program to help teachers improve their instructional skills.
- h) The school lacks an organized curriculum program in all vocational training areas.
- i) That project has not provided appropriate vocational career counselling to students; and that the school's technical advisor is not academically prepared to provide meaningful counselling services to students.
- j) That the project has been partially successful in placing graduates in jobs related to their training.
- k) That most instructors in the school are attending evening classes at local educational institutions in order to receive higher certifications.
- l) That the project needs a social worker and professional career vocational counsellors to cope with students who have special educational needs.
- m) That the pre-artesanal students need more practical experience in the shops as well as more opportunity to understand the theory behind technology.
- n) That the workshop areas lack sufficient stations and appropriate equipment to provide career exploration to pre-artesanal and first year students.

- o) That key administrative figures at the school as well as most of the teachers lack basic communication skills; skills that they need in order to effectively work with one another and with their students.
- p) That pre-artesanal and first year students are in the best position to benefit from the recommended adjustments that the evaluation team is recommending, i.e., the counselling department and improvement of the Talleres.
- q) That project lacks a specialist in curriculum development.
- r) That other educational training-institutions in greater Guayaquil have not been fully utilized in preparing curriculum materials, and in implementing professional growth programs.
- s) That most teachers have not had prior education/training experiences except those they acquired at the "Anzoátegui" school.
- t) That industrial training experts are needed to improve the curriculum development programs in all vocational training programs.
- u) That positive steps have been taken to purchase new and appropriate equipment, develop and prepare related and appropriate modules, teachers guides and materials related to each of the talleres. Also professional growth programs are being planned to be held in early February, 1981 in a solid partnership cooperation with SECAP.

## RECOMMENDATIONS

On the basis of these conclusions and the findings and analyses of the program achievements of the first year of the BSFG-OPG Project, the following series of recommendations are made:

1. That a new administrative organization for BSFG education programs be developed similar to the one proposed in the study, that would give the Project Manager full administrative authority and responsibility for all program aspects at the Anzoátegui school level.

2. That USAID/Quito carefully monitor--through analysis of TA's quarterly reports, BSFG's quarterly reports, etc.--the level of commitment toward major program changes discussed in this report and implied throughout this analysis. Key areas of concern:

a. The establishment and functional utilization of an industry/education council at both the school and program levels.

b. The effective utilization of private sector contributions towards the stated goals of the project.

c. The hiring of key staff members, especially in the vocational counselling pre-artesanal and selected technical/vocational training areas, the promise to improve the quality of instruction in the classrooms.

d. The willingness on key BSFG officials to "get involved" at the program level with the problem-solving processes necessary to arrive at decisions that will improve the project's operation.

3. That Lundy, acting as technical advisor, hold weekly meetings with school and BSFG administration to talk over program implementation problems and discuss new strategies for meeting project goals.

4. That Lundy's reports be written in English and Spanish, developed systematically from the activities programmed in the Implementation Plan, and be distributed to all key figures in the project.

5. That a concentrated effort be made to invite key business and commercial community members to the Industry Education Council to assist in the planning, designing and implementation of the small business enterprise curriculum program.

6. That a special study be undertaken, perhaps with the assistance of key community members, regarding more effective utilization of the School's classroom and workshop facilities. In this study special attention must be given to opening up some avenues to poor girls.

7. That Project should implement a comprehensive staff development program for instructors, teachers and administrators. This program should include:

Identification of evaluation system characteristics;

Management of local evaluation system;

Relationship between evaluation effects and the program improvement process;

Involvement of business, industry labor and government-  
al representatives in the evaluation process;

Facilitating development, prioritizing planning  
and goal setting. Every member of the school faculty should  
participate in a 2-week workshop in February to improve  
his institutional methodology.

Also the staff development program should include training  
in U.S.A. for school level administrators (Salazar and Solór-  
zano) for at least four to six weeks. This training should  
include visits to successful vocational technical training  
programs; the opportunity to be directly involved in the  
learning and teaching environments of classes; and the op-  
portunity to study school administration students' services,  
staff development, the development of lesson plans, super-  
vision of personnel, industrial safety, human relations,  
Women's Bureaus, Libraries and students' organizations.

8. We recommend that the Anzoátegui School contract:  
A curriculum specialist from SECAP - Sección Litoral-- to  
assist Ing. Salazar and Solórzano in the development of  
curriculum materials for general mechanics, auto-mechanics  
and wood working.

The following time tables should be considered:

- By mid July, 1980 curriculum specialist should be  
hired;

- By January 1, 1981 phase I of the curricular development program should be completed as follows:
  - 20 sets of teachers' guides;
  - 20 sets of practical exercises classroom manuals;
  - 20 sets of theoretical-technology manuals related to auto-mechanics, wood working, and general mechanics.

We recommend that the Anzoátegui school improve its working relationships with other local and national employment-training institutions; with SECAP, the Polytechnic University of Guayaquil.

10. We recommend that serious consideration be given to developing a formal working relationship with "Convenio" SECAP-Sección Litoral, for the purpose of receiving better technical assistance in: (a) staff development in professional growth for teacher-administrators, advanced technical vocational training opportunities for graduates of Anzoátegui," and/or curriculum development programs. Already Ing. Rodolfo I. Rosales, Director of SECAP/Guayaquil showed a tremendous personal interest concerning this Convenio

---

\* The Ministry of Labor and Ministry of Education would like to certify all these vocational industrial workers.

11. We recommend that the professional staff of SECAP be utilized more often and more effectively in:

- a. staff development
- b. exchange of teachers
- c. curriculum development
- d. manpower analysis
- e. developing instructional materials
- f. post-certificate work for exceptional Anzoátegui graduates.

12. That BCFG contract with a small, local economic development group to carry out the required manpower needs analysis prescribed in the Project Agreement.

13. That a special certification course in specific vocational education areas be given to all beginning teachers at the Anzoátegui School. This course(s) could be given by SECAP or the Polytechnical University.

APPENDIX I

## References

1. USAID/Ecuador, OPG#518-0007, The Official Grant Project Agreement between USAID/Quito and the Beremerita Filántropica Sociedad del Guayas, 1978.

2. David W. Kohler, James M. Droegham, Characteristics and Needs of Out-of-School Youth, an Informational Paper Prepared for USAID/DS/ED Nonformal Education and Out-of-School Youth Project, Contract No. AID 147, April, 1980.

3. Ibid. pp.5-6.

4. Ibid. p. 10

APPENDIX II

# BEST AVAILABLE DOCUMENT

*Cámara de Industrias de Guayaquil*



Señor Industrial:

Entre los múltiples obstáculos que afronta el sector industrial ecuatoriano para acelerar su desarrollo, no cabe la menor duda que uno de los más acentuados es la carencia de profesionales para tareas de mandos medios o de obreros altamente calificados, capaces de cumplir con eficiencia y seguridad las funciones especializadas a ellos encomendadas.

En más de una oportunidad, esta triste conclusión que la empresa industrial la vive a diario, ha sido motivo de mesas redondas o foros al más alto nivel, que luego de evaluar los recursos humanos de que dispone el medio nacional no han hecho otra cosa que confirmar lo expresado.

Vale mencionar, que el estado ecuatoriano consciente también de esta necesidad inaplazable, creó hace aproximadamente una década el Servicio Ecuatoriano de Capacitación Profesional -SECAP-, organismo que pese a poseer una estructura orgánica acorde a sus bases y postulados; y disponer además de un elevado potencial de recursos económicos, aportados por la empresa privada, no traduce en sus resultados prácticos lo que de él espera la clase empresarial.

Con la ratificación de este criterio que estamos seguros usted también lo comparte, el Consejo Directivo de la Institución, recibió con beneplácito el pedido de los personeros de la Benemérita Sociedad Filantrópica del Guayas, para cruzar ideas a nivel institucional sobre la posibilidad de materializar un proyecto conjunto que siendo de altísima prioridad para nuestro sector, solo será posible habilitarlo merced a la positiva y valiosa ayuda de los sectores directamente beneficiados. Esta reunión se llevó a cabo el pasado 19 de Junio.

Para nadie es desconocido y menos para los guayaquileños, lo que la Sociedad Filantrópica del Guayas viene cumpliendo en este campo a la medida de sus posibilidades desde su fecha de fundación, que data desde el siglo pasado, pese a no contar como organismo de naturaleza privada que -

.....///

es, con más recursos que los que la generosidad guayaquileña le entrega mediante legados de sus benefactores y sus objetivos altruistas, han permitido que diferentes generaciones de estudiantes, de modestos recursos económicos, hayan recibido su gratuita enseñanza y obtenido en sus escuelas la preparación necesaria para ser útiles a la sociedad - aportando con su dignificante trabajo al desarrollo socio-económico - del país y al sostenimiento de sus familias.

Desafortunadamente, el avance de la tecnología en el campo industrial aboca a nuestro sector a requerir cada vez con mayor urgencia de profesionales capacitados en una diversificación de ocupaciones tales, que no es ya posible obtener sus servicios sino a base de la creación de - escuelas técnico-vocacionales como las que se piensa crear, dirigidas por expertos profesionales, que entreguen sus conocimientos y orientación a nuevas generaciones de educandos que serán los trabajadores del mañana.

Los contactos que mantienen sus personeros con entidades representativas nacionales y extranjeras, les ha permitido establecer un acuerdo recíproco de asistencia con organismos técnicos y financieros como son el CISE y la Agencia Internacional para el Desarrollo -AID-, dependencia esta última del Punto Cuarto, a base de cuya cooperación, la del - sector industrial, mas la suya propia, le permitirá llevar a la práctica este propósito.

Señalaremos a grandes rasgos para su debida información, que el proyecto aludido contempla un presupuesto de financiamiento de alrededor de U.S. \$ 1'000.000,00 de los cuales U.S. \$ 330.000,00 los aporta la Agencia Internacional de Desarrollo y U.S. \$ 670.000,00 los debe aportar la contraparte nacional, en este caso el sector industrial.

Sociedad Filantrópica del Guayas entrega por su parte sus instalaciones docentes y el personal de enseñanza que en la actualidad posee. La cantidad que precisa la Sociedad Filantrópica para implementar el proyecto, estará destinada al equipamiento de la Escuela Técnico Vocacional y la contratación de algún personal técnico que prestará sus servicios durante los tres primeros años que durará el ciclo de enseñanza, a cuyo término y sucesivamente se graduarán alrededor de doscientos estudiantes - que pasarán a servir en la actividad industrial tanto de Guayaquil como del resto del país.

La Cámara de Industrias de Guayaquil que contempla entre sus funciones la de propender esta clase de objetivos, está empeñada en coadyuvar a ello y quiere mediante la presente Circular solicitar de usted en forma

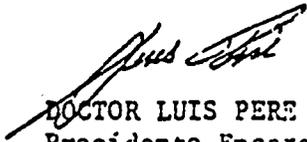
....///

115

voluntaria, una ayuda económica mensual durante el tiempo señalado de tres años, acorde con sus posibilidades financieras particulares, la misma que será entregada en su totalidad a la Sociedad Filantrópica - del Guayas para esta finalidad.

En la seguridad de que el conocimiento que del problema planteado tienen nuestros consocios, la Cámara de Industrias de Guayaquil confía en que su ayuda espontánea y generosa sería la única forma de sacar adelante esta valiosa iniciativa.

Muy atentamente,



DOCTOR LUIS PERE CABANAS  
Presidente Encargado

**APPENDIX III**

MEMORANDUM:

FECHA: SEPTIEMBRE 11/79

DE: SR. JUAN JOSE VILASECA

301

PARA: SR. ROBERTO BOSISIO/DR. ORLANDO ALCIVAR/ING ANTONIO GINATTA/

ASUNTO: ING. JULIO JURADO.-

La Sociedad Filántropica del Guayas está trabajando intensamente para solucionar el problema de la carencia de profesionales para las tareas de mandos medios o de obreros altamente calificados.

Dentro de este programa la Sociedad Filántropica del Guayas ha establecido un acuerdo recíproco de asistencia con organismos técnicos y financieros como son el CISE y la Agencia Internacional para el desarrollo AID.

El proyecto más importante de este programa contempla un presupuesto de financiamiento de más o menos US\$1'000.000,00 de los cuales US\$330.000,00 debe aportar la Agencia Internacional de Desarrollo y US\$670.000,00 la Sociedad Filántropica del Guayas.

Nuestro común y buen amigo el señor Gustavo Illingworth, Presidente, desde hace mucho tiempo, de la Sociedad Filántropica del Guayas me ha solicitado la colaboración de nuestras empresas.

He acordado con el señor Gustavo Illingworth, que nuestro grupo donará la suma de Suces 360.000,00 haciendo un aporte de Suces Diez Mil 00/100 mensuales por 36 meses, a partir de Agosto/79.

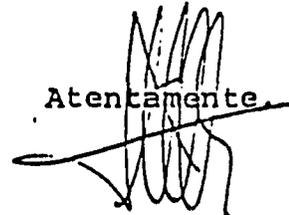
Creo que es una forma sana y conjunta de ayudar a la educación y formación de obreros calificados y la aportación que haremos será a través de EMPASE, en la siguiente forma:

|                   |     |          |
|-------------------|-----|----------|
| FADESA. . . . .   | S/. | 4.000,00 |
| IMSA. . . . .     | "   | 2.000,00 |
| IJESA. . . . .    | "   | 2.000,00 |
| LA LLAVE. . . . . | "   | 1.000,00 |
| EMPASE. . . . .   | "   | 1.000,00 |

Todos estos valores se recibirán mensualmente en EMPASE, quien se encargará de entregar a la Sociedad Filántropica del Guayas la suma de S/.10.000,00 mensuales por 36 meses, hasta completar la suma acordada con el señor Gustavo Illingworth, de S/.360.000,00.

c.c. Sr. Gustavo Illingworth

Atentamente



118



# BEST AVAILABLE DOCUMENT

CHEQUE N° 1994 \*

## Cámara de Industrias de Guayaquil

Guayaquil, \_\_\_\_\_ de \_\_\_\_\_ de 19\_\_

SI: [ ]

Páguese a La orden de \_\_\_\_\_

CAMARA DE S/. 9000000

La Suma de \_\_\_\_\_ SUCRES

Banco Industrial y Comercial  
CIA. CIE. No 2-705-7

| CONCEPTO  | MAYOR DEBITOS |     | CODIGO |            | MAYOR CREDITOS |
|---|---------------|-----|--------|------------|----------------|
|   |               |     | Cuenta | Sub-Cuenta |                |
| pagado por concepto (s) de: <u>contribución por los m-<br/>nos un Agosto, Setiembre, y Octubre de 1971,<br/>de Escuela Técnica Vocacional de la Escue-<br/>ra Filantrópica del Guayas, a los valores<br/>y con el título a Compañía Guayaquilera del<br/>Banco S.A., según recibos de Ingresos Adjuntos.<br/>C. Ind. y Comercial.</u> | 1.9.000,00    | 101 | 411    | 45         |                |
|   |               |     | 101    | 02         |                |

Recibí Cheque  
*[Signature]*  
Cédula N°

Elaborado por:  
*[Signature]*  
Secretaría Financiera

Revisado por:  
*[Signature]*

Aprobado por:  
*[Signature]*

Imp. Jover S.A.S.

**APPENDIX IV**

Informe de la visita realizada a la Sociedad Filantrópica del Guayas el día Miércoles 18 de Junio de 1980

La visita la realicé con el Sr. Eugene Lamb. Primero lo hicimos a la oficina de Contabilidad de la Sociedad Filantrópica del Guayas nos atendió la Contadora Srta. Susana Freire Roca, la misma que me hizo conocer y revisar sus cuentas pues ella lleva dos cuentas separadas la una con respecto a la ayuda que recibe de AID y la otra del Sector Privado.

En cuanto a los reembolsos de los gastos realizados, más el primer adelanto que se les entregó según copias XEROX que le entregó al Sr. Lamb, están depositados en el Banco Industrial y Comercial. Los desgloses de los gastos se encuentran bien detallados en el Libro Diario. Lo lleva en forma cronológica y todos los recibos debidamente numerados con las respectivas firmas de responsabilidad. Lleva folders para cada cuenta, además tiene un Libro Auxiliar de Bancos.

Para el Sector Privado está recibiendo ayuda de EMPASE \$/110.00 sucres y de la Cámara de Industrias \$/10.000. Los valores de este sector lo lleva en otra cuenta separada lo tiene depositado en el Banco Holandés Unido y me ha manifestado que ese dinero está depositado y que todavía no lo han utilizado.

Tambien me ha manifestado que el Ing. Salazar maneja un fondo rotativo de S/.1.000.

Luego fuimos a visitar la Escuela donde funcionan los diferentes talleres y ahí pudimos constatar la adquisición de varios equipos, herramientas de trabajo por ejemplo en el taller Radiotécnico y televisión, taller de Artesania, Torno, Automotriz.

No pudimos obtener un registro e inventario de lo concerniente a la compra de equipo, maquinaria y herramientas, ni en la oficina de Contabilidad ni en la Escuela que visitamos.

Recomiendo que es muy importante y necesario que se lleve un KARDEX o sea una tarjeta de cada cosa que se refiere a equipo y herramientas, maquinaria con el respectivo valor, mantenimiento para saber la realidad y tener una idea completa de la vida del proyecto.

Además créo conveniente llevar otra cuenta completa de los dos sectores, o sea de AID y el Sector Privado, porque según el convenio pude observar que solamente está funcionando la parte de AID y eso no debería ser porque todo es un solo proyecto y para que funcione con éxito tendría que ser como estaba previsto en el convenio.

APPENDIX V

RATINGS

- N= No chance to observe or not applicable  
 1= SB= Significantly below level acceptable for entry level employment  
 2= B = Slightly below level acceptable for entry level employment  
 3= A = Acceptable for entry level employment  
 4= EA= Exceeds acceptable level, strong characteristics  
 5= O = Outstanding, very exemplary performance

| AREA/CHARACTERISTIC   | N | SB<br>1 | B<br>2 | A<br>3 | EA<br>4 | O<br>5 |
|---|---|---------|--------|--------|---------|--------|
| <u>WORK HABITS</u>  |   |         |        |        |         |        |
| 1. Uses equipment and tools skillfully.   | N | 1       | 2      | 3      | 4       | 5      |
| 2. Uses safe working procedures.....  | N | 1       | 2      | 3      | 4       | 5      |
| 3. Demonstrate Initiative.....  | N | 1       | 2      | 3      | 4       | 5      |
| 4. On time and at work unless there is a valid reason for missing.....                      | N | 1       | 2      | 3      | 4       | 5      |
| 5. Calls in when cannot be at work.....   | N | 1       | 2      | 3      | 4       | 5      |
| 6. Follows directions of supervisor   | N | 1       | 2      | 3      | 4       | 5      |
| 7. Makes appropriate decisions and..... judgments on the job.....                           | N | 1       | 2      | 3      | 4       | 5      |
| 8. Willing to learn new skills.....   | N | 1       | 2      | 3      | 4       | 5      |
| 9. Asks questions when he/she needs.... help.....   | N | 1       | 2      | 3      | 4       | 5      |
| 10. Works effectively with other workers  | N | 1       | 2      | 3      | 4       | 5      |
| 11. Works effectively with his/her..... supervisor.....                                     | N | 1       | 2      | 3      | 4       | 5      |
| 12. Works effectively without direct.... supervision.....                                   | N | 1       | 2      | 3      | 4       | 5      |
| 13. Has a positive attitude toward the.. job.....   | N | 1       | 2      | 3      | 4       | 5      |
| 14. Has a positive attitude toward self.  | N | 1       | 2      | 3      | 4       | 5      |
| 15. Knows skills and knowledges he/she needs to acquire to improve his/her work.....        | N | 1       | 2      | 3      | 4       | 5      |
| 16. Learns new skills quickly.....  | N | 1       | 2      | 3      | 4       | 5      |
| 17. Wants to improve his/her work.....  | N | 1       | 2      | 3      | 4       | 5      |
| 18. Has the skills needed to acquire entry level employment related to present job.....     | N | 1       | 2      | 3      | 4       | 5      |
| 19. Has the skills needed to acquire entry level employment not related to present job..... | N | 1       | 2      | 3      | 4       | 5      |
| 20. Has the motivation needed to acquire full-time employment.....                          | N | 1       | 2      | 3      | 4       | 5      |
| 21. Would you be willing to hire this person? ___(1)Yes, ___(2)Undecided ___(3)No           |   |         |        |        |         |        |
| 22. What are the participant's major strengths?   |   |         |        |        |         |        |
| 23. What are the participant's major weaknesses?  |   |         |        |        |         |        |

| Sample of:<br>TEACHERS' RESPONSES TO INDIVIDUAL<br>NEEDS, EDUCATION AND EXPERIENCES. | EDUCATION AND EXPERIENCE  |        |           |            |          |            |      |       |          |       |            |           |       |           |          |           |            |           |            |     |         |           |  |
|--|---|--------|-----------|------------|----------|------------|------|-------|----------|-------|------------|-----------|-------|-----------|----------|-----------|------------|-----------|------------|-----|---------|-----------|--|
|  | ACADEMIC  | SCHOOL | TECHNICAL | UNIVERSITY | CATHOLIC | UNIVERSITY | TECH | LOCAL | INDUSTRY | STATE | UNIVERSITY | EQUIPMENT | TUTOR | TECHNICAL | TRAINING | TECHNICAL | ASSISTANCE | PRACTICAL | EXPERIENCE | NEW | CURRENT | MATERIALS |  |
| 1. Where did you received your training and your practical experience?               | 27  | 13     | --        | 3          | 27       | --         |      |       |          |       |            |           |       |           |          |           |            |           |            |     |         |           |  |
| 2. How would you improve your instruction in your shop?                              | --  | --     | --        | 2          | 19       | --         | 27   | 23    | 11       | 23    | 26         |           |       |           |          |           |            |           |            |     |         |           |  |
| 3. Which skills are necessary to complement instructions?                            | --  | --     | --        | --         | --       | --         | 26   | 21    | 12       | 27    | 22         |           |       |           |          |           |            |           |            |     |         |           |  |
| 4. Should certification be required of vocational instructors?                       | Eighteen teachers responded positively<br>Nine recommended just practical experience  |        |           |            |          |            |      |       |          |       |            |           |       |           |          |           |            |           |            |     |         |           |  |
| 5. Would you participate in a professional growth program?                           | Eighty-five percent of them showed readiness to attend training programs such as conferences and seminars for approximately 1 1/2 hours per day, without pay! |        |           |            |          |            |      |       |          |       |            |           |       |           |          |           |            |           |            |     |         |           |  |
| 6. How would you improve your students performances?                                 | --  | --     | --        | --         | --       | --         | 26   | 27    | 27       | 27    | 22         |           |       |           |          |           |            |           |            |     |         |           |  |

This chart illustrates numbers of teachers needs, accomplished level of education

125

APPENDIX VI

INVENTARIO DE LAS NUEVAS ADQUISICIONES

TALLER DE MECANICA

|  |   |
|--|---|
| 10 Lentes 411336                       | 1 Tarraja Grenfield # 310                   |
| 1 Llave de Boca DR-1012                | 1 Compás recto # 1 10"                      |
| 1 " " DR-1416                          | 1 " exterior 2 10"                          |
| 1 " " DR-1618                          | 1 " interior 3 10"                          |
| 1 " " DR-1820                          | 5 Reglas STARRET # 636 - 300 mm.            |
| 1 " " DR-2022                          | 8 Limas planas Handy Kile de 8"             |
| 1 " " DR-2224                          | 2 Limas 1/2 caña de 12"                     |
| 1 " " DR-2428                          | 2 Limas cuadradas de 12"                    |
| 1 " " DR-3436                          | 1 Esmeril banco MILWAUKEE 3/4 H.P.          |
| 1 " " DR-810                           | 6 Arcos de sierras # 125                    |
| 1 Destornillador plano PK-12           | 1 Llave francesa # 2087 - 8"                |
| 1 " " PJ-8                             | 1 Llave francesa # 2089 - 12"               |
| 1 " " PN-6                             | 2 Juegos de brocas H.S. 1/16 c 1/2 (15 pzs) |
| 1 " " PN-4                             | 1 Escuadra Stanley #100 - S                 |
| 1 Alicata de 8 P-28-A                  | 4 Mascara para soldar HV1-161               |
| 1 Destornillador PN-10                 | 6 Pie de Rey - 6" VIS                       |
| 1 Tornillo de banco Reed #25-5"        | 1 Micrometro 941 X 0 -4"                    |
| 3 Tornillo de banco Reed 24-4          | 1 Base Magnetica E903                       |
| 6 " " Record 4- 4 1/2                  | 1 Reloj Indicador 2 - 1                     |
| 2 " " " 25-6"                          | 2 Brocas Centrar # 3                        |
| 3 Martillos de bola # 54-116           | 2 Brocas Centrar # 6                        |
| 3 " " 54-12                            | 2 Portacuchillas p' cortar TH21             |
| 5 Flexometro P3 Me                     | 1 Taladro MILWAUKEE 1600-1/2                |
| 2 Cinceles 740 - C 5/8                 | 1 Esmeril " 5220                            |
| 2 " 745 - C 3/4                        | 1 Mordaza RIDGID - 6 DPS                    |
| 2 " 746 - C 7/8                        | 2 Aceiteras 800-2F                          |
| 2 " 747 - C 1"                         | 4 Escuadras 8"                              |
| 1 Juego de llaves de boca #3000A proto | 1 Broca de 5/8"                             |

TALLER DE TORNERIA

|                                    |                                      |
|------------------------------------|--------------------------------------|
| 4 Limas planos Handy Kile          | 1 Piedra Esmeril A-46 6 x 1 x 5/8    |
| 2 Limas Cuadradas 12"              | 1 " " A-60 6 x 1 x 5/8 - 60          |
| 2 Limas 1/2 caña 12"               | 2 Gueche de rosca # 52               |
| 1 Escuadra combinación #900 de 12" | 1 Micrómetro # 436 RL 1 - 2"         |
| 2 Arcos sierras # 125              | 1 " # 436 RL 2 - 3"                  |
| 1 Juego de Brocas DM-15            | 1 " # 577 0 - 1"                     |
| 1 Llave de boca DR-1012            | 1 Nivel Stanley # 313 - 18"          |
| 1 " " DR-1416                      | 1 Choque #120 3/16 - 1 1 1/32        |
| 1 " " DR-1618                      | 1 Espiga # B 24 MKD                  |
| 1 " " DR-1820                      | 12 Cuchillas para torno #2303 - 5/16 |
| 1 " " DR-2022                      | 12 " " " 2302 - 1/4                  |
| 1 " " DR-2224                      | 1 " " Interior #8145 7/16            |
| 1 " " DR-2428                      | 1 " " " #8142 1/4                    |
| 1 " " DR-3436                      | 1 " " " #8143 5/16                   |
| 1 " " DR-810                       | 1 " " " #8141 3/16                   |
| 2 Playo V-7WR                      | 2 Calibradores de 8"                 |
| 1 Taladro T-240 de 5/8"            | 2 " de 6"                            |

### TALLER DE EBANISTERIA

1 Extensión de 20 Mts. completa  
3 Formones Stanley # 40 C- 1/4  
3 " " 40 C- 1/2  
3 " " 40 C- 3/4  
3 " " 40 C- 1"  
2 Compases punta # 1-12"  
1 Rebajadora Routers Stanley # 90200 - 2 HP  
2 Lijadoras eléctricas Iskra Perles # L 704  
1 Sierra eléctrica portatil Stanley # 90714 - 7 1/4  
1 " " " " 80278 - 7 1/4  
6 Guilletas Stanley #151  
2 Limas escorfinas planas de 10"  
1 Docena de destornilladores planos  
1 Docena de destornilladores de estrella  
2 Juegos de brocas de 1/16-1/2" H.S.  
2 Birbiqui "Enestra"  
1 Tenaza # 20 - 8"  
1 " # 6 española  
3 Taladro de mano Stanley Ref. 803  
2 Aceiteras Chinas 225 cc  
3 Escorfinas redondas 19846-8  
3 " " 19875-10  
3 " media caña 17615-8  
3 " " " 17683-10  
12 Destornilladores Stanley 1006-12  
2 Playos USA 428-8  
3 Escuadras falsa Acesa 309-25-10  
2 Pistola p' compresor 528  
2 Taladros electrico Italia 1/2 - ND- 13  
2 " " Stanley 91145-1/4  
2 Alicates Checo 350-8  
1 Doc. Limas triangula bellota 8"  
1 " " " " 10"  
1/2 " Piedras para asentar 1 x 2 x 8  
15 Mtrs. Sierra cinta alemana  
2 Sierra caladora Stanley 90076  
2 Niveles de aluminio 42600-24  
6 Cepillos Stanley # 6 C  
3 " " # 7 C  
3 " " # 5 C  
3 " " # 3  
6 Serruchos Vellota #4551-14"  
3 Flexometros Stanley # 33-166 de 6 mtrs.  
1 Reverbero completo

### TALLER DE OFFSET

1 Barra de pines altos  
1 Perforador de registro Berkey  
4 Lámparas de 420 x 120  
3 Cubetas de 16 x 20"  
3 Cubetas de 11 x 14"  
1 Cizalla Morane de 24"  
2 Vasos graduados de 16 onzas  
1 Regla Faber  
3 Tijeras grande  
1 Racleta

TALLER DE RADIO

|   |                    |
|---|--------------------|
| 1 Multímetro Digital B-K Mod. 283   | 1 Desarmador 2751B |
| 1 Comprobador de tubos Mod. 7478  | 1 " 2721           |
| 1 Multímetro Electrónico Mod. 177   | 1 " 2751           |
| 1 Generador de Barras Mod. 1248   | 1 " 2751A          |
| 1 Capacímetro Mod. 801  | 1 " 2727           |
| 1 Probador de Pantallas Mod. 470  | 1 " 2728           |
| 1 Analizador de TV. Mod. 1077   | 1 " 2710           |
| 1 Osciloscopio Mod. 450   | 1 " 2711           |
| 1 Seguidor de Señales EICO Mod. 147   | 1 " 2712           |
| 1 Multímetro Simpson Mod 260  | 1 " 2716           |
| 1 Comprobador de Transistores Mod. 5208   | 1 " 2718           |
| 1 FP - R-5  | 1 Cortador 2731A   |
| 1 Bobina Desmagnetizadora Meisner 192000  | 2 Pinzas 2738      |
| 1 Frecuencímetro Digital Mod. 1801  |                    |
| 2 Pistola Weller Mod. 8200  |                    |
| 1 Juego de Sacabocado Mod. 895  |                    |
| 1 Juego de Calibradores   |                    |
| 1 Manual de Válvulas  |                    |
| 1 Manual de Transistores  |                    |
| 1 Punta de Alto Voltage Mod. HVP-5 (OBSEQUIO)                                   |                    |
| 1 Taladro Eléctrico Ref. 7104-3/8   |                    |
| 1 " " " 7004-1/4  |                    |
| 3 Escorfinas 19875-10   |                    |
| 2 Limas Triangulas 10"  |                    |
| 1 Barrena salomónica 184-4  |                    |
| 2 Juegos de Broca A.V. SKF 1/8, 3/16, 1/4, c/jgo. 5/16, 3/8, 15/64, 11/64, 7/32 |                    |
| 3 Alicates CHALLENGER #3346-g   |                    |
| 2 Alicates " 3272-g   |                    |
| 1 Martillo de bola #54-116  |                    |
| 2 Llaves francesas #101-10  |                    |
| 1 Martillo de uña #91 1/2   |                    |
| 2 Arcos de sierras #565   |                    |
| 1 Desarmador STANLEY #2750 2 1/2  |                    |
| 1 " " 2751 3 1/2  |                    |
| 1 " " 2752  |                    |
| 2 Breaker TQC 1P 50 Amp.  |                    |
| 1 Lámpara fluorescentes 40 W. Jápones   |                    |
| 20 Metros de cordón 2 x 12  |                    |
| 12 Tacos de fibra 2 x 12  |                    |
| 2 Parlantes SP-5060   |                    |
| 1 Voltímetro KA52Ca 2189B   |                    |
| 1 Amperímetro 2239D   |                    |
| 1 Calibrador 480A   |                    |
| 1 " 48SB  |                    |
| 1 " 484A  |                    |
| 1 Desarmador 2724   |                    |
| 4 Control 977B  |                    |
| 1 Desarmador 2723   |                    |

TALLER DE AUTOMOTRIZ

1 Aceitera  
1 Rectif. Valvulas vs stand 3001 PX 333040-4  
1 " Asiento Valvf. sgm set PZ 333347-3  
1 BH.-24 Martillos PZ 373100-7  
1 BH.-32 " PZ 373102-3  
1 BH.-48 " PZ 373104-9  
1 FS.-25 Marcador PZ 373386-2  
1 GB.-15 Escobillas PZ 373392-0  
1 PK'-12 Destornillador plano PZ 373611-3  
1 PJ.- 8 " " PZ 373612-1  
1 PN.- 2 " " PZ 373614-7  
1 PN.- 6 " " PZ 373616-2  
1 PWR-14 Cincel (llave) PZ 373633-7  
1 PWR-8 Llave PZ 373644-4  
1 PN-4 Destornillador plano PZ 373645-1  
1 PN-10 Destornillador PZ 373686-5  
1 SDC3 " estrella PZ 373747-5  
1 SCM-14K Jgo. de llaves CJ 373754-1  
1 SCW-11k Jgo. de llaves CJ 373758-2  
1 SD-6P Jgo. Destornillador PZ 373765-7  
1 V-142 Dados PZ 373929-9  
1 V-202 " PZ 373930-7  
1 V-202 " PZ 373930-7  
1 V-222 " PZ 373932-3  
1 V-162 " PZ 373933-1  
1 V-262 " PZ 373935-6  
1 V-182 " PZ 373937-2  
1 V-242 " PZ 373941-4  
1 V-206 " PZ 373943-0  
1 V-322 " PZ 373946-3  
1 V-342 " PZ 373948-9  
1 V-362 " PZ 373950-5  
1 V-382 " PZ 373952-1  
1 V-402 " PZ 373954-7  
1 V-422 " PZ 373956-2  
1 Playo 537 Pz 374800-1  
1 " 347 PZ  
1 " 347G  
1 TW-200F torcometro  
1 Taladro T-240 de 5/8'  
1 4000-AB Juego de extractores  
1 115 Gata de 8 tonl.  
1 753 " 6 tonl.  
1 Automovil Oldsmobile 1959

APPENDIX VII

The Project Review team wishes to express its sincerest thanks to the members of the faculty of the Escuela "Anzoategui" de Artes y Oficios. Without their assistance in this evaluation, and, more importantly without their dedication to their responsibilities as teachers and leaders of these poor youth, the results of the study would be of little use and the hopes for the future of little promise.

Calendar of Research Activities

Project Review for the Benemérita  
Sociedad Filantrópica del Guayas

Gene Lamb  
Armando Orellana

June 9 - 30, 1980

- June 9 - 1. Project review team arrived in Quito
- June 10 - 1. Orientation (in-depth) by Patricio Maldonado,  
Development Officer, USAID
- June 11 - 1. Preparation of research methodology and  
project review plan
- a. reviewed background materials on  
project
  - b. met with John Sanbrailo  
USAID/Ecuador
  - c. last minute details ironed out  
with Patricio Maldonado, USAID/E
  - d. preparation of special Project  
Review Plan in Spanish for the  
Filantrópica Project Staff
- June 12 - 1. Review team flew to Guayaquil
- a. Orientation meeting with Filan-  
trópica Project Team
- 1. Mr. Gustavo Illingworth,  
President of the Society
  - 2. Mr. Humberto Carbo Avellán,  
Treasurer
  - 3. Dr. Félix Sarmiento Núñez,  
Director of the School
  - 4. Engineer Angel Solórzano Alvarado,  
Program Coordinator
  - 5. Engineer Adriano Salazar Vera,  
Associate Program Director
  - 6. Mr. William Lundy,  
Technical Advisor
  - 7. Lamb, Orellana and Maldonado

- June 13
1. Met with Acting COUNSULATE General of U.S. at Guayaquil.
  2. Visited the Filantrópica Vocational Education Program and talked with a number of teachers, students and teachers' aides.
  3. General Project review strategy session with Filantrópica Project team
- June 14
1. Met with Mr. Lundy re: administrative problems
  2. Met with Solórzano and Salazar re: program's instructional problems.
  3. Prepared selected project review instruments for future application.
- June 15
1. Reviewed research strategy.
- June 16
1. Met with Filantrópica project team at the school (5 hours)
  2. Prepared special reports re: meetings above
  3. Called Maldonado in Quito re: fiscal questions on project
  4. Met briefly with Illingworth and Carbo
- June 13
1. Met with Carmen Arteaga at the US Consulate General in Guayaquil to design survey questionnaires and initial formats. We worked for 6 hrs.
- June 15
1. Met with Salazar, Solórzano, Lundy, to review teachers survey and visited shops at school.
- June 16-19
1. Met at school with Salazar, Solórzano to administer teachers, student survey and analyzed staff development and potential student services programs.
- June 20
1. Met with Filantrópica Project team and Patricio Maldonado at the US Consulate General. We presented partial findings and suggested implementation plan.
- June 21
1. Met at the U.S. Consulate General with Salazar, Solórzano, to work on crucial issues and studied steps needed to successfully accomplish goal and objectives of projects. We worked for 10 1/2 hrs.

- June 23 - 1. Visited SECAP headquarters located at Castro, Guayaquil. Met with key people including Ing. Rodolfo Idrovo Rosales, executive director of SECAP; Ing. Marcossi and Hugo Yagual - explored potential convenio to enhance linkages between La Filantrópica meeting. Continued for uninterrupted 16 hours concluded with a very productive and successful experience.
- June 24 - 1. Met with photographer, and art teacher touches to illustrations.
2. Worked with Lundy, Salazar, Solórzano in preparing implementation plan.
3. Developed with local practitioners phase I of two phases of the Curricular Development Program.
4. Developed with local school administrators and SECAP, the professional growth program for teachers of the Anzoátegui school.
- June 25 1. Met shortly with Don Gustavo Illingworth and Dr. Sarmiento. We talked about roles of key people in the project, and philosophy of Industrial Vocational Education.
2. Continue working on students' services curricular staff development programs with Lundy, Salazar and Solórzano.
3. Continuing the analysis of collected data and writing about them.
4. Met with top administrators of La Filantrópica and Ms. Chacón of USAID/Quito to study the fiscal endeavors of the project.
5. Dr. Lamb met several times with key people representing the business Industrial Community of Greater Guayaquil.
- June 26 1. We talked to Maldonado about secretarial equipment. He advised of ways to solve problem on hand
2. Worked very arduously to prepare fiscal presentation for top administrators.
3. Continue writing report - analyzing charts - final touches for illustrations, etc.

4. Local school administrators and evaluators team worked until 11:30 p.m., analyzing all phases of the program and preparing for final meeting with local top administrators.

5. We worked until 12:04 a.m.

June 27 1. At 6:30 a.m. team of evaluators and school administrators were ready for presentation. Final meeting started. Local school administrators and technical advisor were the speakers. Meeting was successful. Top administrators agreed to observations, suggestions and recommendations made by presentors and evaluators. It ended with thankful notes from Mr. Illingworth and Dr. Félix Sarmiento.

Remarkably, Lundy, Saizary, Solórzano, did a very respectable job in presenting "their" implementation plans to Mr. Illingworth and Dr. Sarmiento, and Humberto. They were very pleased with results. Mr. Illingworth offered to do everything in his power to implement suggested adjustments.

2. Lamb finished his report. However, Orellana was still working on it. Finally, it all came to an end in a very cordial atmosphere.

June 28 Returned to Quito

June 30 1. Met with Maldonado and put final touches to report, finished typing work and copies were made for distribution.

July 1 Evaluation Team met at 6:45 with Mr. Maldonado. Went to USAID Mission headquarters and assembled final report.

Meeting with USAID Mission top officials was prepared, and findings were discussed.

July 2 We met with P. Maldonado to explain more in details findings and specific recommendations--including the professional growth program for Salazar-Solórzano.

APPENDIX VIII

# BEST AVAILABLE DOCUMENT

## PROFILE OF INSTRUCTIONAL

### Faculty at Escuela "Anzoategui"

| NAME AND AREA            | AGE | YEARS TEACHING | LEVEL OF EDUCATION | OTHER RELEVANT EXPERIENCES      |
|--------------------------|-----|----------------|--------------------|---------------------------------|
| <u>TYPOGRAPHY</u>        |     |                |                    |                                 |
| Sr. Humberto Villao      | -   | -              | Anz. H.S. Col.     | Resigned                        |
| Sr. Alberto Andrade      | 49  | 32             | x x                | 3 yrs. industrial maintenance   |
| Sr. Jorge Apolinario     | 45  | 30             | Anz. Jr. High S.   | 22 yrs. exp. as sales person    |
| Sr. Santos Apolinario    | 43  | 13             | " " "              | chief editor of newspaper       |
| Sr. Leonardo Cevallos    | 55  | 22             | " " "              | 17 yrs. chief of press division |
| <u>OFFSET</u>            |     |                |                    |                                 |
| Sr. Jorge Avecillas      | 28  | 04             | " High S.          | ----                            |
| Sr. William Llerena      |     |                |                    |                                 |
| Sr. Jose Reyes           |     |                |                    |                                 |
| <u>RADIO</u>             |     |                |                    |                                 |
| Sr. Raúl Grijalva        | -   |                |                    | Retired.                        |
| Sr. Roberto Vizcaíno     | 19  | 1.3            | " " "              | 1 yr. radio shop                |
| Sr. Daniel Espinoza      | 32  | 15             | " Jr. High S.      | 16 yrs. radio and TV shop       |
| Sr. Leonidas Tomala      | 25  | 03             | " " "              | 7 yrs. radio and TV shop        |
| Sr. Tyrone Villacís      | 19  | 01             | " " "              | 2 yrs. radio shop               |
| <u>LATHE</u>             |     |                |                    |                                 |
| Sr. Victor Luque         | 32  | 16             | " " "              | ----                            |
| Sr. Julio Valle          | 20  | 0.6            | " " "              | 2 yrs. industrial               |
| Sr. Luis Rivadeneira     | 19  | 0.2            | " " "              | 2 yrs. industrial               |
| Sr. Angel Govea          | -   |                |                    | Retired                         |
| <u>GENERAL MECHANICS</u> |     |                |                    |                                 |
| Sr. Jose Vives           | 44  | 23             | " " "              | 4 yrs. in general mechanics     |
| Sr. Julio Navarro        | 20  | 1.2            | " " "              | 1.5 yrs. in general mechanics   |
| Sr. Daniel Huacon        | 34  | 11             | " " "              | C.F.M. in general mechanics     |
| Sr. Ernesto Sandoval     | 22  | 0.2            | " " "              | ----                            |
| Sr. Felix Peña           | 21  | 2.5            | " " "              | 2 yrs. in general mechanics     |
| Sr. Menorco Veira        | -   | -              |                    | Retired                         |
| Sr. Carlos Bailon        | 19  | 1.2            | " " "              | 2 yrs. in general mechanics     |

PROFILE (CONTINUED)

| NAME AND AREA             | AGE | YEARS TEACHING | LEVEL OF EDUCATION | OTHER RELEVANT EXPERIENCES |
|---------------------------|-----|----------------|--------------------|----------------------------|
| <u>SELF-MOVING</u>        |     |                |                    |                            |
| Sr. Elías Morán           | 50  | 18             | Anz. H.S.          | 38 yrs. self-moving shop   |
| Sr. Fernando Zambrano     | 55  | 21             | " "                | 16 " " " "                 |
| Sr. Edison Casanova       | 21  | 1.8            | " "                | 1.3 yrs. self-moving shop  |
| Lcdo. Ramon Alcívar       | 38  | 10             | " "                | 12 " " " "                 |
| <u>CARPENTRY</u>          |     |                |                    |                            |
| Sr. Benigno Castro        | 27  | 10             | " "                | 3 yrs. carpenter's shop    |
| Ab. Abel Tiluano          | 48  | 30             | " "                | ----                       |
| Sr. Luis Reyes            | 30  | 8              | " "                | 4 yrs. carpenter's shop    |
| <u>PRE-MANUFACTURED</u>   |     |                |                    |                            |
| Sr. Presley Jiménez       | -   | -              | -                  | Retired                    |
| Sr. Victor Domínguez      | 23  | 4              | " "                | ----                       |
| Sr. Jorge Guevara         | 22  | 1              | " "                | ----                       |
| Sr. Luis Peñaherrera      | 44  | 26             | " "                | Artistic drawing           |
| <u>SPECIAL OCCUPATION</u> |     |                |                    |                            |
| Lic Byron Sarmiento       | 4   |                | " "                | ----                       |
| Ab. Hermelo Vargas        |     |                |                    |                            |
| <u>EXAMINERS</u>          |     |                |                    |                            |
| Sr. Ramon Vidal           |     |                |                    |                            |
| Sr. Antonio Basantes      |     |                |                    |                            |