

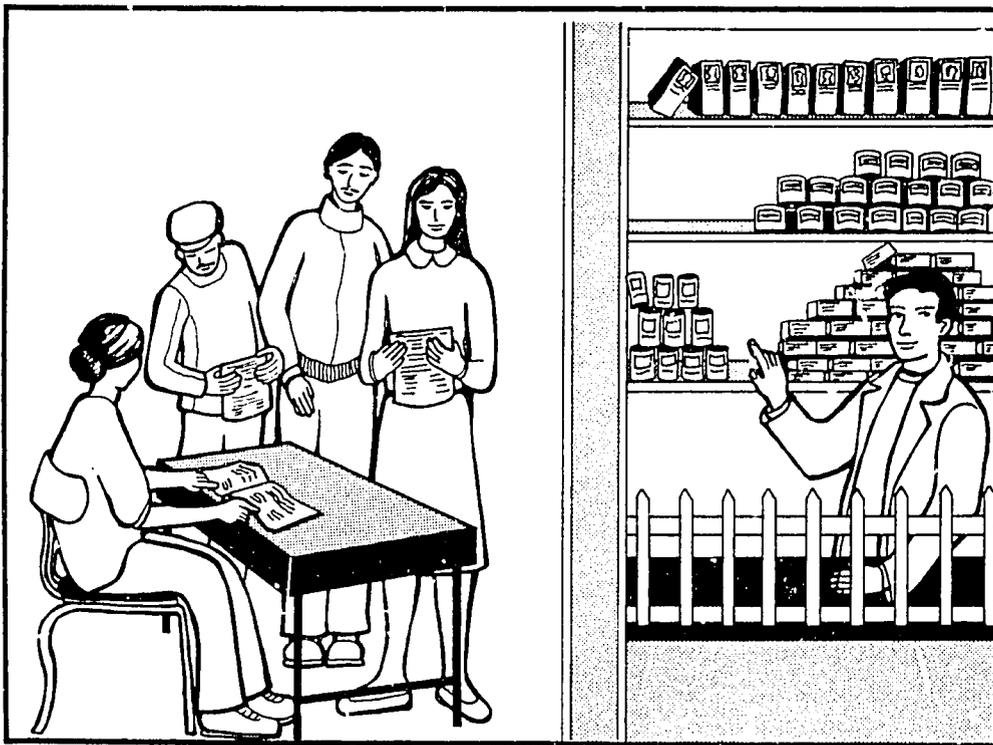
LITERACY AT WORK:

Linking Literacy to Business Management Skills

A SYNOPSIS

**Literacy-Oriented Functional
Education Project**

DSPE-C-0045



**Agency for International
Development**

**Creative Associates
Washington, D.C.**

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Linking Literacy to Business Management Skills

A SYNOPSIS

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**Agency for International
Development**

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PREFACE

Literacy at Work: Linking Literacy to Business Management Skills is a product of the AID-funded (DSPE-C-0045) Literacy-Oriented Functional Education (LOFE) Project. Over a period of three years, the Project examined how economic improvement serves as incentive to achieve new levels of literacy through participation in practical skills training. A preliminary draft of this document was reviewed widely so that contributors were able to analyze how incentives have been associated with literacy motivation. On this basis, Creative Associates designed and implemented two field research activities in collaboration with LDC skills training projects.

Chapter I of the document reports on two LOFE Project activities and concludes with a summary of research findings. Chapter II presents a set of positions justifying investment in basic education, including various levels of literacy and numeracy. Chapter III analyzes economic incentives from the perspective of individual participants. The analysis includes a definition of the value of literacy that considers the nature of the economic result, the tasks necessary for its attainment, and the ways individuals perceive the economic opportunities available. Chapter IV discusses how societal and linguistic factors influence levels of literacy and numeracy and existing environmental support for literacy. Chapter V examines how learners' self-perception relates to economic opportunities and the skills needed to participate. Hypotheses that perception is a major variable in learners' motivation to acquire literacy skills and that perception can be refined in literacy training suggest an analysis of learners' personal values, self-awareness and occu-

pational concepts to determine their influence on motivation. Chapter VI examines the motivational effect which integrated literacy/vocational skills programs may have over motivation to acquire skills. Chapter VII offers recommendations based on research findings and theoretical background.

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CHAPTER I.
LINKING LITERACY TO BUSINESS MANAGEMENT SKILLS:
FIELD EXPERIENCES IN ECUADOR AND TUNISIA

Introduction

Whether they are rural cooperative members in the mountains of central Ecuador or small business owners in the slums of South Tunis, the importance of literacy skills is reflected in the economic value they have to the individuals involved. Many small scale entrepreneurs of the Third World live at marginal subsistence levels. The leeway they have to risk innovations is very slim, their resources in time and money limited. Their access to credit, information, and technical assistance is marginal. But if they are aided to acquire literacy skills that are applicable to their own economic activities, they can then move into more viable and sustained economic situations. This help involves identifying options, assessing and reducing risks, and acquiring business-related assistance as integral parts of literacy programs which are based on the expressed needs of individuals and production groups that constitute the bulk of the Third World's informal economic sector.

The Literacy-Oriented Functional Education Project (LOFE)

The LOFE Project was implemented in three phases, the first involving a preliminary version of this document. Literacy practitioners throughout the world reviewed a synthesis of existing materials and documents concerning cultural variations in economic incentives, environmental influences on literacy motivation and appropriate adult educational strategies. Their review refined the hypotheses tested in two LDC settings.

The project's second phase field tested the research hypotheses in practical skills training programs. The central research hypothesis was:

A participatory educational model which emphasizes one's perception of existing economic opportunities and the requisite literacy skills for improving those opportunities will influence one's ability and motivation to acquire necessary new levels of literacy.

Two secondary hypotheses developed for field testing were:

- One's perception of economic opportunities in the immediate environment will influence one's motivation to acquire new levels of literacy related to those economic opportunities.
- One's perception of the economic and social value ascribed to literacy by society will influence one's motivation to acquire new levels of literacy.

Relationships among four factors were studied in field research: one's perception of economic opportunities; the social and economic value ascribed to literacy by a society; the impact of a participatory educational intervention on motivation to acquire economically and environmentally related new levels of literacy; and new levels of literacy resulting from participation in the programs. Five research questions guided the study:

1. How does a participant perceive economic incentives related to the skills training received?
2. How does the economic and social value ascribed to literacy by a society influence one's motivation to acquire new levels of literacy?
3. How does the perception of an economic opportunity motivate one to acquire new levels of literacy?
4. What influence does participatory training have on one's motivation to acquire new levels of literacy?
5. What effect does participation in training have on attitudes and skills?

The Two Sites

In collaboration with the two LDC subcontractors, the Fundacion Ecuatoriana de Desarrollo (FED, Quito) and the Mellassine Integrated Development Project (MID, Tunis), Creative Associates provided assistance for 16 months of collective training and research in:

- evolving designs and methodologies for adult practical skills training;
- developing literacy-oriented training materials in cooperative education and management and small business accounting and inventory management;
- elaborating and incorporating formative evaluation methods into practical skills training;
- developing and refining research approaches for assessing effectiveness of materials, trainers, and the overall program.

In Ecuador FED staff worked with rural Ecuadorians to develop literacy-oriented training materials for cooperative education and management. After analyzing selected aspects of cooperative management and identifying requisite literacy skills for improvement, they then developed training materials and activities in direct response to the literacy requirements of the economic activity. Following two staff training workshops on evaluation and materials development, five workshops were held for rural Ecuadorians under the Creative Associates contract. In Tunisia, Creative Associates' work with MID focused on the participatory development of literacy-oriented practical skills training materials for small business owners. The materials, modified from the Ecuador experience, dealt with accounting and inventory management for carpenters, blacksmiths, and plumbers. Before conducting three training workshops, project staff attended preparatory workshops on participatory NFE (nonformal education) methodologies, materials development, formative evalua-

tion, research, and field tested new materials with groups of small business owners.

Project Selection Criteria

Interested in the replicability of research and training components, Creative Associates used a number of criteria to select a project: involvement in practical skills training; existing materials adaptable to specific research concerns; use of the country's official language in training; basically literate participants of both sexes of working age; and willingness of project staff to accommodate the necessary interruptions of collaboration. With preference given to AID-funded programs and to organizations with interest in evaluation and research, Creative Associates modified selection criteria in the course of project visits. Discussions refined the central research hypothesis to accommodate specific program focuses. For example, concern about the research led to modification of the literacy skill level criterion. Both project staffs questioned whether training could achieve intended results with totally illiterate participants in the short time allotted.

The Ecuador Site. From November 1980 through June 1981, FED conducted LOFE training and research in five workshops in two provinces. With prior experience in running programs to meet vocational, agricultural, educational, and organizational needs of the 700 member Northwest Co-operative for Community Development, FED had worked with minifundistas (small landholders) who have disadvantages of small landholdings; distance from markets; poor soil quality, climate, irrigation, and technology. Training activities focused on accounting and business management as well as technical content in egg, beef,

and other agricultural production. One aim was to enhance the abilities of minifundistas to gain greater control over agricultural production factors and costs by organizing and gaining access to resources through cooperatives.

The Tunisia Site. LOFE Project activities were conducted by MID's small Business Loan and Advice Unit, which provides access to credit, technical assistance, and business advice for small business owners of the South Tunis slum area. The Unit has been conducting workshops on accounting, business finance, inventory management, and business math and literacy. Other assistance includes various kinds of on-site technical assistance and consultation. In offering advice to about 400 clients, the Unit conducts extensive research activities on their needs in developing small business. Most businesses are small family operations with low income, have few contacts with financial institutions, seldom report paying taxes nor have official business registrations. Though training has been offered in the past, few business owners have shown interest. LOFE's five workshops were held at the project's facility located in the slum redevelopment area.

Research Methodology

The action research methodology employed at the sites was designed to assess the effects of the educational intervention and participant attitudes before and after each workshop. The approach provided the contractor with required data on motivation and appropriate methods and the subcontractor with formative evaluation and participatory training design concepts. Principles that guided the collaborators in planning were that research should: be undertaken by researchers and literacy/vocational training specialists only

after its purposes and design were understood; respond to the priorities and interests of local researchers; not jeopardize the program or interests of local officials and researchers, disrupt organizational goals, use control groups, or require delay of any other planned interventions; and be responsive to learners' needs and integrated into ongoing programs. Research operations in both sites involved:

collection of baseline data on the social and economic context completed before training. This data was used to prepare and adapt training materials.

participant entry assessment for entry level data on present literacy and technical skills and motivation for attending made through a literacy pre-test and a separate entry level questionnaire.

participant exit assessment through a literacy post-test, an individually administered exit level questionnaire, and another questionnaire completed two weeks later.

In both sites research operations were integral parts of training. Baseline data gathered at the first session fed into materials development and provided information to validate self-reported literacy and other skill levels for later content. Participants' achievement levels were evaluated through the exit-level questionnaire and literacy post-test. They also served as formative evaluation for the revision of materials and methods for subsequent workshops. This information was supplemented by qualitative data collected in follow-up interviews, trainers' notes and diaries, observations, and recordings of exercises. Considerable time was spent training researchers to adapt the design to local realities and project priorities. Attention was also given to enhancing the local subcontractor's sense of ownership over the project. Lessons from Ecuador helped facilitate the integration of research activities into a training design for the Tunisian subcontractor.

Development of Training Materials

Creative Associates and subcontractor staff geared new project materials to the active exploration of participants' literacy skills needed for their immediate economic environment. In each site content was drawn from research interaction with clientele and adapted to the level of literacy indicated by baseline data and self-reports. Materials that encouraged active participation replaced more directive methods. In Tunisia photo-literature was used to introduce key concepts, followed by discussions to sharpen oral fluency skills, which led to written materials, case studies, and specific financial management worksheets. The development of oral fluency first was important since concepts introduced were new to most participants. Once oral fluency was mastered, trainers moved to printed matter, having the advantage of knowing the interests and skills of participants. In Ecuador the need to work through groups to gain economic advantage was facilitated by the introduction of group training methods.

Two major objectives for field training were (a) to provide content and activities which allowed participants to identify and study those literacy skills needed for their immediate economic activities; and (b) to use current adult learning approaches to involve learners more fully in the training process. Creative Associates proposed two elements as crucial to increasing learner motivation for literacy, one being an emphasis on learner involvement in the examination of economic opportunities; the other being learners' identification and specification of those literacy skills necessary for their existing economic activities. Training activities introduced:

- formative evaluation procedures to monitor levels of participant involvement, diverse teaching methods and delivery;
- procedures to elicit relevant content to identify economic opportunities and requisite literacy skills;
- a procedure to analyze and modify instructional materials;
- a variety of techniques for staff training; and
- pre- and post-test procedures to measure participant progress.

Participatory materials and activities focused on the enhancement of learner self-concept, the analysis of economic opportunities, identification of appropriate literacy skill levels, and increased initiative in using individual and collective resources. Workshop sessions gave participants the chance to apply technical content, develop action strategies, and exercise leadership roles and behaviors. After exploring existing economic opportunities, learners focused on acquiring the literacy skills required to implement technical content. Training was adapted to each workshop group through formative evaluation activities.

Training of Trainers

Being more responsive to learner needs meant trainers needed to understand the local economic and social context; develop a realistic participatory training design; develop appropriate materials; and use flexible training strategies. Trainers attended workshops to develop their own skills in these areas. They also carried out various research activities to provide data for appropriate materials and methods and profiles on learner characteristics. They then collaborated with participants on the final workshop materials. A sense of ownership over the materials and research was thus developed among the trainers.

Implementation: Ecuador

Context. The five LOFE workshops conducted by FED from January to May 1981 included 60 instructional hours scheduled around other daily activities of participants. Content was divided into 20-24 hours of literacy-oriented instruction with the remainder devoted to technical subjects such as poultry and egg production, animal husbandry, and agriculture. Groups were selected on the basis of their engagement in an economic activity, their level of basic literacy and numeracy, and their interests in the program. Among the five groups was a 12-member egg production cooperative which had been recently established and had just constructed a laying house. The second group was the ten member Board of Directors of the Regional Community Development Cooperative, which was responsible for a demonstration dairy farm and smaller activities. The third group was composed of 18 cattle raisers who were interested in the training as a way to help organize themselves into a formal cooperative. The fourth group, a communal association of 17 participants, was part of a larger association interested in increasing agricultural production. The fifth group was a 17-member cattle raisers' association organized to upgrade member herds. Each group had been assisted by FED in the past.

Characteristics of Participants. Seventy of the 78 participants completed the 60-hour offerings. Their characteristics are summarized as follows: 81% were men; 81% were engaged in agriculture with the remainder involved in other commercial activities; 50 were between 15 and 35 years old; 75% had attended primary school with the remainder having other educational experience; half had attended training workshops before; all were from minifundista families; and all were cooperatives members.

Implementation: Tunisia

Context. Five workshops were conducted by MID's Loan and Advice Unit between January and June 1982, three on small business accounting and two on inventory management. Workshop themes were chosen on the basis of participant interests. Each module was offered in six three-hour sessions with two follow-ups of four hours each. All but the first follow-up session were presented at Project training facilities, the remaining session taking the form of a consultancy on site. Forty-two men and three women completed two workshops on accounting, but half of them did not complete the remaining three workshops due to scheduling conflicts during Ramadan and decreased motivation on the part of those who had not yet received Project loans they had applied for.

Characteristics of Participants. Most participants were carpenters, followed by other small commercial occupations. Four salient characteristics emerged from baseline research.

Participants were the owners of small enterprises. Most of the over 400 enterprises were unstable family operations with shifts from one occupation to another quite common.

Participants were marginal entrepreneurs. Few of the businesses were registered or paying social security taxes. Credit was usually limited to family members. The operations were marginal because their owners had limited understanding of legal and administrative standards or sources and procedures for obtaining credit.

Participants had limited technical and literacy skills. With an estimated 60% rate of illiteracy in the zone, only 13 of 25 participants maintained an organized accounting ledger or recorded expenditures and receipts. Only two participants reported using stock monitoring procedures.

Participants needed, but usually resisted, technical assistance. Only 18 of 68 enterprises involved in the research sample expressed a need for technical assistance. Older business

owners were less inclined to invest technical assistance in themselves than younger ones. Time constraints were felt in ongoing business commitments. Entrepreneurs felt they needed basic literacy to take advantage of training.

Findings

Data used to answer the research questions were collected through research activities described earlier in a synthesis with site, workshop and subcontractor reports.

How does the social and economic value ascribed to literacy by a society influence an individual's motivation to acquire new levels of literacy?

Ecuador. Over 50% of workshop participants had experienced training previously and were aware of FED's attempts to link training with agricultural production. Over half indicated on entry-level questionnaires they were interested in obtaining new knowledge about running their cooperatives, with many linking this knowledge to more profits and better financial management. Most participants expressed knowledge of the linkage between new levels of literacy and fuller participation in economic opportunities, citing specific skills such as contracting, keeping cashbooks, and calculating sales prices profitably. They saw potential benefit to themselves as individuals and to their collectives, including improving the image others had of them and their cooperatives.

Tunisia. Participants indicated they were attending workshop sessions for economic reasons. They saw new levels of literacy as being necessary to improve on immediate economic activities.

How does the perception of an economic opportunity motivate an individual to acquire new levels of literacy?

Tunisia. Perceptions of economic gains to be acquired through new levels of literacy were potent incentives to attend the workshops. Learning practical skills in training helped participants realize they could apply them toward furthering economic benefits. This exit-level data, however, was not substantiated in new practices by the time of follow-up consultation. Many participants attended the workshops because they thought learning new skills would enhance the likelihood of gaining credit. By the fifth workshop, when participants learned they would not receive loans immediately, attendance fell dramatically.

Ecuador. Participants quickly learned what skills they needed to manage their cooperatives better whenever training exercises focused on the economic gains to be achieved through applications of specific literacy skills to specific management tasks. Only after they had the opportunity to apply skills in practical exercises did they feel confident they had learned to use them at work.

How does an individual in a skills training program perceive economic incentives related to the skills training he/she is receiving?

Tunisia. Besides indicating they were primarily interested in accessing capital as an expectation of the workshop, participants expressed a desire for information on accounting, business management techniques, law, and marketing. Most had difficulty identifying the kinds of training, skills, and technical assistance they needed for content purposes, saying they preferred trainers to specify what they needed. Though training methodologies stressed participant involvement in the design, implementation, and evaluation of content activi-

ties, exit-level questionnaires showed participants continued to have problems being precise about their needs after training.

Ecuador. In response to needs expressed by participants to work more effectively in groups, training stressed group dynamics designed to create a team atmosphere, strengthen group cohesiveness, and provide a chance for participants to learn about themselves. The "Group History Exercise," seen as most valuable by more than half of the participants, was used to help each group explore its origins in relation to present and future economic pursuits. The exercise provided the opportunity to practice new skills in group process, collaboration and leadership toward planning, decision making and group problem solving in relation to immediate economic activities, many of which they had not previously considered. There were several examples where new knowledge and skills were immediately translated into action.

What influence does participatory training have on an individual's motivation to acquire new levels of literacy?

Ecuador. The participatory nature of training in situations requiring groups to identify constraints, explore alternatives, and decide on actions appeared to contribute to feelings of individual and group self-confidence. According to the participants, their experiences with more directive methods has been less effective in helping them express their needs in specific, content-related terms which could be acted on by the group.

Tunisia. Answers to entry-level questions about how training could help those relatively few participants currently using some accounting method to take fuller advantage of economic opportunities indicated awareness of the relationship between accounting practices and business success. Other responses from this small group indicated an appreciation of the positive role

of planning, management, and other specific skills in the effort to improve business. In questions about inventory management, those few participants who said new procedures might be of help indicated it would be no use if too "scientific." Exit-level data indicated most participants felt training responded to their needs and was of direct applicability, with some dissenting. They liked the utility and their increased awareness of literacy needed for existing economic activities.

What effect does participation in training have on attitudes and skills?

In order to provide another perspective on the training workshop, MID opted to research the following question using three data sources: literacy pre- and post-tests and follow-up sessions. Though not explicitly asked, information from the Ecuador site is added here for comparison.

Tunisia. Changes attributed to training can be grouped by level of verbal expression skills where significant improvements in participant abilities to distinguish income, profit, receipts, and net income were seen; by progress in learning to complete cashbook forms and align figures, though mathematical operation skills remained a concern; and by the continued level of participation throughout the workshops even though skill levels were not homogeneous. Follow-up workshops, however, indicated few new skills were actually put into practice. With notable exceptions, few had radically changed their behavior. Many returned to the accounting systems they used before. Some resisted instituting new practices for personal reasons.

Ecuador. According to pre- and post-tests, participants improved oral reading skills, FED staff attributing this change to participatory methodologies. Writing remained difficult, with several mistakes being common.

Significant training experience in elaborating work plans in planning sessions allowed participants to become familiar with vocabulary for administration, planning, and "verbal savvy" necessary in business undertakings. Numeracy skills remained a problem throughout the workshops, with mathematical operations remaining a stumbling block. Most participants felt able to communicate new information on accounting and business management more effectively to others, while also considering it necessary to seek more information on the management of their economic activities.

* * * * *

Summary. One major objective of the workshop was to assist groups and individuals to take more control of their economic activity by examining the use of resources, decision-making patterns, and management of inputs and returns. Participants identified constraints, explored alternatives, and made more informed decisions. Summaries are organized as follows.

Improved Technical and Business Literacy Skills

Progression to acquiring new reading and writing skills is facilitated by attention given to development of oracy skills in accounting and business management.

Practical application of new vocabulary and concepts to immediate economic activities facilitates higher reading, writing, and numeracy performance.

More attention needs to be paid to the development of written numeracy skill operations.

The oracy-to-literacy sequence in accounting and business management appears to contribute to greater self-confidence for later reading and writing.

Those who already exhibited innovative behaviors tended to benefit more from the program.

Motivation to Participate in Training and to Acquire New Literacy Skills

Economic incentives appear to play an important role in motivating individuals to acquire new literacy skills through training. This was especially evident where economic returns were immediate.

Participants with past training experiences were more receptive to training content and processes.

Where participants could identify the immediate environment, determining the literacy skills necessary to take advantage of them and analyzing group potential enabled participants to evaluate their current capabilities and future potential. Participants' awareness of how new literacy skills related to economic activities and action is one of the most significant outcomes of training.

Past experiences in training programs linked to production issues increased motivation to attend and participate in the workshops.

Perceived Utility and Applicability of Training Content to Immediate Economic Activities

The more immediate the economic payoffs are for participation, the greater the interest in identifying and applying the literacy skills to improve business skills.

Educational activities combining improved production (content) with management (literacy) were identified as most useful for daily work. Participants also demonstrated their confidence in transmitting new information to others.

The design of training activities appears to have enhanced participant perception of the relationships between their economic activities and the need for requisite literacy skills; the more immediate the economic activity, the quicker the change in perception.

Design of Appropriate Materials and Training Methods for Integrating Literacy-Oriented Instruction with Practical Skills Training

Participatory training helped participants develop individual and group confidence and feelings of usefulness of the training experience.

Participatory strategies are time consuming and are often slowly adopted by training institutions.

Training materials for encouraging participants' exploration of their economic activities enable participants to identify requisite literacy skills.

Oral fluency skills should be emphasized before proceeding to literacy skills.

Training exercises that build on participants' store of knowledge contribute to self-confidence.

Participatory methodologies facilitate participants' involvement in gauging their own progress.

Appropriate Strategies for Training Trainers

Including trainers in each step of the design and implementation process increases their sense of ownership over the training.

Trainer training should model participatory methodologies to allow trainers to experience new methods firsthand.

Trainer evaluations of training should be a daily activity conducted in a minimally threatening way.

CHAPTER II.

ECONOMIC ARGUMENTS FOR LITERACY

This chapter reviews different economic arguments in support of literacy programs. The arguments are presented as summaries of justifications for public policy and social purpose for investment in literacy work. Since many program labels and arguments were made, the typology centers on the main points involved in each, with considerable overlap among them. Literacy programs emerged in practice as mixtures of supporting rationales and whatever opportunities and pedagogic resources became available.

Over the past two decades, a number of arguments in support of literacy programs have been advanced for economic reasons. The thrust of these arguments has been directed toward those who make economic policy decisions and individuals who would be persuaded to pursue literacy to better their economic standing. Among the arguments are the following.

The Social Good Argument

Considering the pressures experienced by many countries to show progress in development, mass literacy was believed to be one way to demonstrate a commitment to achieve the kind of better informed citizenry essential for economic progress. This commitment was realized through government's expansion of primary education and promotion of mass literacy campaigns. The problem with this diffuse approach was that without more specific goals and strategies, governments were not able to develop a consistent focus on specific needs, set suitable priorities, and attain measurable results. Demands for both quality and practical value in literacy programs increased as governments experienced difficulties in maintaining initial levels of commitment to improve the social good.

The "Minimum Essential" Argument

Throughout the 1960s, many educators assumed development to correspond with modernization. This meant an expanding modern economy would need to draw increasingly on a growing rural labor pool which was adequately trained to work in urbanized industrial areas. One of the skills essential for working in modern society was believed to be literacy, usually in the official language of the country. By the late 1960s, the earlier urban focus for skills training broadened to include those skills necessary to engage in modernizing activities on the rural front. The effort to modernize the rural sector became evident in various parts of Francophone Africa where education was combined with development strategies. The impetus behind programs such as animation rurale originated in reaction to colonial policies of restricted citizenship and the metropolitan focus for social and economic activities. In the 1970s, the level of skills thought necessary for participation in the modern sector both expanded and changed. There appears to be no final fixed quantity or level of skills minimally necessary to ensure participation, but rather, a minimum fit for certain situations, which require higher skill levels.

The "Missing-Input" Argument

In the 1960s, the view that economic growth was a matter of adding more inputs to get more outputs entailed finding exactly what inputs were missing from the development picture. Many economists and educators of the time believed development occurred through a series of progressive stages and certain competencies, such as literacy, were necessary to create a trained work force as one precondition for progress. By the 1970s, the notion of a basic, minimum literacy level gave way to the understanding that the functions

of literacy, not the numbers of literates, needed to be stressed. The object of literacy was not simply the achievement of a mechanical ability but a complex subject involving ideology and economics.

The Eradication Argument

Another argument made from the modernization point of view was that illiteracy itself prevented progress into the modern world. Illiteracy represented a whole range of traditionalist values, behaviors, and attitudes assumed to account for economic inertia. "Campaigns" and "wars" were organized to eliminate illiteracy and presumably the "backwardness" it represented. These efforts linked strategies to achieve literacy with the development undertakings of revolutionary movements or internationally funded programs to remove obstacles to economic progress. These arguments were weakened by lack of a working definition of literacy, shortcomings in understanding illiterates, and the failure to agree on how much to invest in literacy programs.

The Distributional Argument

By the late 1960s critics began to recognize national efforts to modernize were having ill-effects in traditional rural communities by unfairly slanting the distribution of benefits toward the modernizing urban sector. Economists and educators argued because rural people were more economically "rational" and "educated" within their contexts than previously believed, the development process should be expanded to include rural areas. Issues of more equitable distribution of goods and services were put forward by the ILO World Employment Programme.

The Responsive Argument

Planners should provide the kind of literacy training demanded by those who have identified their own needs for economic advancement. This approach meant it was possible to analyze rates of return on investment in literacy programs by measuring enrollment and subsequent income levels. The assumption underlying this approach corresponds with learner-centered methodologies where learners are the starting point for planning investment in literacy. Weaknesses of this argument involve learner needs for reliable information on economic opportunities and the notion that income differentials for literates can reflect regressive, class structured biases in favor of the few who become literate.

The Modernization Argument

Literacy is posed to be a first step in achieving a national consensus on a range of values, including how to participate in the political and economic life of a modern state. Literacy was one requirement for citizen participation besides being socially good and necessary for prosperity. One frequently asked question concerned the kinds of opportunities afforded by participation.

The Empowerment Argument

This argument focuses on the development of powers by the individual necessary to take advantage of opportunities available within society. By the late 1960s critics began to question the nature of participation implied by literacy. The desire to choose whether and how to participate with respect to development was expressed most frequently in Africa and Asia. No longer were

broader development goals assumed to correspond automatically with individual goals.

The "Conscientizing" Argument

That the individual has the power to critically perceive and act on the context of which he/she is part is an underlying tenet of any literacy process. Freire's influence has inspired many practitioners of literacy to design a pedagogy that helps learners develop an understanding of their relationship to their immediate environment as a first step in transforming it.

The Socializing Argument

Larger groups have their own purposes for promoting literacy among their members. These purposes, though somewhat flexible to the needs and aspirations of individuals, include religious conversion, political participation, and other forms of specialized education for inclusion in the functioning of a group or national setting.

The Integrating Argument

Both the learners and the new reality society as a whole is attempting to create should be considered in literacy programming. There is a dual purpose for literacy: to "conscientize" and to prepare individuals to function in that new reality. Literacy undertaken for either purpose alone is ineffective. No matter what goals the functional or "conscientizing" programs have, achieving literacy depends on integrating newly acquired skills with real economic opportunities.

The Structuralist Argument

Because society is in a constant state of restructure as production systems change, previously skilled workers need to "requalify" themselves in order to keep up with technological advances, specialization, and revaluations of goods and skills. Literacy is needed to become competent in new areas. Restructuring inevitably recurs within a capitalistic economic system, requiring the worker to undergo formal retraining. One consequence of the restructuring process has been a break down of traditional forms of education, resulting in illiteracy on many fronts, including loss of traditional skills in farming and crafts. Proponents of this view argue literacy training must therefore be accompanied by systematic changes to provide jobs for all.

The Technological Efficiency Argument

With advances in technology, economists began to realize that technology itself became a factor in the development process. Usually rural peoples were left out of the distribution of goods and services. At first, attention was paid to strategies and methods for diffusing knowledge about new technologies through the medium of functional literacy. Later, the degree to which technologies needed to be adapted to rural situations came into clearer focus. It is anticipated that a combination of efforts to improve functional literacy and to adapt technologies to rural settings are now required.

The Economic Motivation Argument

Analysis of structural and technological factors suggests that literacy depends on learner perceptions of a connection between economic benefit and the acquisition of literacy skills. Individuals are motivated to become literate by their economic needs. There is growing evidence to suggest that people tend to become literate when they realize the process of making changes is facilitated by being literate.

CHAPTER III
A FRAMEWORK FOR ASSESSING THE ECONOMIC
VALUE OF LITERACY TO INDIVIDUALS

This chapter explores economic factors involved in motivating individuals to acquire literacy, beginning with definitional problems of context, the opportunities provided, and characteristics of individual learners. Emphasis is placed on the importance of individuals' incentives to invest time, money, and other resources according to their assessment of net benefits. Individual assessments are argued to be the primary factor in designing literacy programs. Four general hypotheses about the economic value of literacy to individuals are discussed.

First Hypothesis: Individuals value literacy skills when the skills provide economic rewards from employment or production.

Discussion: Individuals will value those literacy skills which are directly rewarded in wages or other job benefits. For those who are self-employed rewards may be in cost savings, increased productivity, or competitive advantage. For those employed within the household reward will usually be in time saved and technical efficiency.

Second Hypothesis: Individuals value literacy when opportunities for self-improvement exist within their individual contexts.

Discussion: When changes in the economic environment and new opportunities emerge, individuals may take advantage of the new situation by improving themselves through increased literacy and other behavioral changes. This hypothesis suggests that literacy is more likely to be a motivator in changing contexts where new opportunities emerge.

Third Hypothesis: Besides direct economic rewards literacy also contributes to economic welfare through its effects on economic decision making.

Discussion: Since subsistence producers and economically marginal workers face great risk in making changes, they need to assess the possible consequences of change by providing new ways to acquire information on how to participate more effectively without having to get a new or better job or more pay or produce a new product or service. Literacy can help in acquiring this information.

Fourth Hypothesis: Individuals value literacy when social and economic mobility is high.

Discussion: As mobility across social, occupational and geographic boundaries becomes more difficult without literacy, the need to become literate grows stronger. In societies where there are few or rigid social boundaries and small disparities in income the motivation to attain literacy is less than in societies characterized by many boundaries and disparities.

Definitions of Economic Value

Literacy appears to have economic value for individuals in the following ways:

- as a condition for employment leading to monetary gain.
- as a skill having economic utility in terms of reductions in costs and time.
- as a means for obtaining information and assessing the risks involved in making economic decisions.
- as a factor increasing self-reliance and independence and enhancing mobility and self-confidence for new opportunities.
- as a precondition for skills training and other activities leading toward economic opportunities.
- as a condition for membership or leadership in economic activities such as cooperatives and unions.

Even though there may be general agreement on the social value of literate citizens, the economic reasons certain individuals pursue literacy are not well understood. Making a precise statement of value is difficult because:

- the question of motivation for literacy is intimately linked with economic motivation.
- perceptions about how individuals value literacy are equally as important to consider as purely economic ones.
- literacy will have different uses in different contexts.

- types and levels of literacy vary according to differences in economic situations. Its perceived value will also vary.
- literacy is valued for usually more than one reason, depending on individual perceptions of economic benefit.
- having participated in a rare educational opportunity may hold as much value to participants as gaining skills.

Perceptions of economic value vary greatly, depending on individual situations. Monetary differences in wages have been used as a means to determine the value of literacy to some individuals. But the value of literacy cannot be restricted to subsequent differences in wages, mainly because value is influenced by other factors as well. Certain individuals who produce for subsistence consumption or who trade on the fringes of a money economy, can still see economic benefits where the relation to monetary gain is indirect. A more expanded definition of economic value is necessary to evaluate the contributions literacy can make toward desired economic results. This definition encompasses (1) the results themselves; (2) the actions through which the results may be attained; and (3) the way choices are made in pursuit of available opportunities.

Literacy Obtains Its Value With Reference to Some Desired Economic Result

Whatever economic results can be identified as desired by learners and tied to literacy can be said to enhance the value of literacy. The learner must perceive the connection between literacy and the economic result desired. The implication for analysis of motivation for literacy is to be more responsive to the personal calculus of the individual than to the calculus of society. Educators need to be concerned with the economic needs, aspirations and expectations of learners as a first step in program planning.

Literacy Obtains Its Value Through Application to Some Task or Activity

An economic value for literacy exists for an individual when he/she has and perceives the opportunity to apply that skill to some task that will result in personal economic benefit. Literacy planners need to pay careful attention to the economic opportunities that may present themselves in the context of the learners, such as jobs, credit, and other demands for literacy skills.

Literacy Has Value to the Individual When It Increases Opportunities or Helps Overcome Constraints Perceived in the Environment By the Individual

Learners must perceive that some economic use can be obtained from becoming literate. If employers require literate workers, they must demonstrate how individual workers will also benefit from acquiring literacy skills. In comparing whether the individual or the group to which the individual belongs benefits more, planners should understand the relative importance of personal and group motivation to the individuals involved.

The Role of the Economic Context

All individuals participate in the market economy in some way. Though the extent of participation may vary according to the activities of the producer, educational planners can assume that the buying and selling of goods and services affects all people. Not only is it important for individuals to perceive the personal utility of various levels of literacy in the exchange of goods and services, they must also be able to assess the values placed on this exchange by employers, consumers, and other producers. If individuals see

that the assessment enhances the value of opportunities and benefits, they may be motivated to become literate.

In competitive market situations where literacy is rewarded, it would be economically rational to try to become literate to the extent economic margins allow. If conditions of subsistence prevail, margins are likely to be minute. Planners can assume only those who have marginal risk-taking opportunities will be economically motivated to obtain and act on information that would require them to invest personal resources. For most of those without this "room," the most rational stance may be to act only when methods are well known and accepted and risks minimized. It is important for planners to know what the threshold of marginality is before committing resources to literacy. They can choose to invest where individuals have room to try new behaviors. The expected rate of return must usually exceed 30% before subsistence farmers adopt new practices.

The following contextual factors appear to affect the economic utility value of literacy:

- Changes in the economic context such as improvement in the price of a key crop or input and the availability of new economic opportunities or benefits may convince the individual the risk-taking threshold may be reached faster.
- In a context where innovations are being introduced and economic changes are occurring, literacy improves the ability of producers to acquire information for economic decision making. Literate groups tend to diffuse innovations more effectively and learn about problems or successes elsewhere.
- The need for literacy may also vary with the amount of instability individuals see in the marketplace, subsistence farmers tending to fall back on the traditional habits and larger producers perhaps risking changes to take advantage of new opportunities. Literacy planners need to take account of how to reduce the risks perceived in new economic opportunities through content and methods.

- Motivation to reach literacy may increase when other income activities to supplement subsistence levels can no longer be done without being literate.
- New ways of integrating with the market economy may be made available to those who are literate. Obtaining credit, forming cooperatives, making contracts and renting land in innovative combinations are ways to reduce personal risks for innovation.

Individual Characteristics

Literacy planners should bear in mind the economic risk-taking abilities of individuals. Most illiterates have little room to innovate. Their opportunities are very limited. While it may be true economic opportunities are limited by lack of literacy, it may be just as true lack of literacy is influenced by lack of economic opportunities. Most illiterates are not in a position to reap immediate economic benefits from becoming literate. Being outside the economic mainstream that rewards literacy, most illiterates do not perceive why they should acquire literacy skills.

Most illiterates make their living through a variety of activities, farming being one. They span a number of economic contexts. In planning literacy programs educators need to take account of the diversity of interests among rural workers to assess their economic motives. The following points can be of help in this assessment.

1. The sequence and pattern of economic activities will usually be diverse. The change contemplated may not be in an area of activity most important or current to the learner.
2. The activity on which the worker depends for subsistence may not offer the most room for innovation.
3. Changes in activity should be considered since motivation may be the strongest to do something else.

4. The amount and areas of activity over which the individual has discretionary power, such as having secure title to land or the ability to hire labor and land, may be a potentially fruitful area of focus.

The following synthesis of categories are suggested as ways to group illiterates according to economic need for literacy.

By age: usually adults whose appreciation of literacy grows as their responsibilities and aspirations are made clearer.

By type of employment: among subsistence, semi-subsistence, self-employed, wage employed, and those (predominantly older adolescent women) who aspire to work for wages.

In rural areas: among small farmers who could produce for family and surplus, marginal farmers who depend on nonfarm supplemental income, and landless farm laborers who depend on poverty-level wages.

In urban areas: among new immigrants who find high economic value in reducing uncertainty, the self-employed, unskilled workers needing mobility in established plants and workers in new plants needing to adjust to new technologies.

Economic Incentives to Become Literate

Even though it may appear to be economically advantageous to become literate, many individuals do not do so. Planners need to gain a better understanding of the costs and benefits of literacy programs even though they are not easy to define. They include such items as "piggy-backing" services, personal and social costs, opportunity costs and others. Measuring benefits is even more difficult. Programmers need to be aware of those costs that affect individual motivation and behavior, among them being:

time invested and time to receive benefits;

risk involved in not reaching the subsistence threshold, failure and social sanctions associated with new behaviors; and

monetary costs of income foregone, fees, capital, and supplies.

While costs are more readily seen and felt, benefits are more difficult to define. The learner may not risk future gains in the face of immediate costs. But if learners want to become literate enough, they will persist through barriers of pedagogy and many costs.

People also need to feel some sense of confidence about the future. It appears as if the urban worker may perceive the risk involved in getting a higher wage or a new job to be worth more than the rural worker, who values secure employment more. The rural worker who does not seek to migrate would find less incentive to become literate. This confidence factor also has a bearing on the slow pace with which rural workers adopt changes. Two conditions appear to allay this sense of risk. First, where participation in a group is involved, risk-taking appears higher. The joint planning process and confidence in group acceptance allay fears of standing out among others. Literacy programs can take advantage of existing groupings of people, such as cooperatives and worker collectives. Second, the integration of literacy programs with long-term group commitments to other forms of change, tends to reduce feelings of risk and build confidence. As people develop confidence in one form of change, they tend to develop confidence in others. It appears literacy program planners should take steps to ensure their programs respond to existing opportunities. Literacy should not overwhelm learners with information but introduce a new tool for building confidence in the practice of controlling change.

Literacy Project Design Variables Affecting Economic Incentives

In designing a project, planners need to consider the perceived costs and benefits involved to the learner. Actual costs can be affected by the timing

and location of the training, its flexibility, and the perceived value of the time spent in training. Costs should be borne by both learners and offerers in some appropriate balance. There should be some cost to learners as an indication of the value they perceive in attaining literacy. Public support of literacy programs is a necessary indicator of the importance of the learning activity. Theoretically, unmarried young adults seeking their first jobs stand the most to gain from literacy, but the individuals with perhaps the highest motivation are somewhat older workers who perceive some occupational need. It appears easier to design a program for a homogeneous group of learners where the motivation profile, aspirations, needs, values, attitudes, costs, and time available are more uniform. Training should be applied at points perceived close to the learners, where they are more likely to share interests and needs. Interaction between prospective or current employers can be enhanced at this level. Motivation for literacy can be increased by making benefits larger, costs smaller and by reducing doubts and raising confidence about benefits and costs. When assessing the private and public benefits of literacy, private benefits appear higher due to cost subsidies, individual control over benefits, investment of "free" goods, and transferability to unintended uses. Literacy programs need to be designed so that learners perceive value in their contexts.

CHAPTER IV.

ENVIRONMENTAL FACTORS AS MOTIVATING FACTORS FOR LITERACY ACQUISITION

This chapter explores existing social and linguistic factors which influence motivation to become literate. These factors are reflected in activities requiring literacy for particular purposes. The strength of environmental factors is argued to be influential in the motivation to learn literacy skills.

Societal Incentives and Factors

Noneconomic incentives fall into three categories: normative social pressure, gatekeeping, and personally-held or discretionary goals. Normative social pressure is exerted by institutions which present specific behavioral criteria for members, including the acquisition of literacy skills. When social institutions use literacy as a means to restrict membership, this is called gatekeeping. When individuals are motivated to learn literacy skills on their own outside of daily work or home tasks, they have personally-held or discretionary goals for literacy.

Incentives originate in various social groupings. The family serves as a transmitter of cultural values, one generation to the next. The family can serve as a powerful reinforcer and support for learning literacy skills. It can serve its members by managing resources to allow time for individual members to acquire new skills. It can also resist this learning opportunity by enforcing norms that keep women at home and men occupied by working. There is evidence to suggest that family members whose standard of living improves tend to be literate. Additional discretionary income seems to be associated with innovations. Families also tend to act as units when provided with new information obtained by a member. Adoption of new agricultural practices

tends to occur more frequently among literate families. Household management is facilitated by literacy skills, including record-keeping, measurement, interpersonal communication, and economic decision making. The family's influence on the benefits of literacy can be a prominent factor affecting motivation among its members.

Religious institutions provide incentives for members to become literate. The practice of religion often demands literacy for the reading of scripture, singing of hymns, and the assumption of leadership roles. There is also precedent for literacy learned in a religious context to be applied to other contexts. The attainment of status roles is frequently associated with literacy in more formal varieties of a language, serving as a way to control membership.

Literacy retention rates seem to be related to the number of years spent in primary school. Illiteracy is associated with lack of opportunities for formal schooling, but the achievement of higher rates of literacy among adults through schooling mechanisms alone would require substantial lead time. Normative pressure to acquire literacy skills can be expected to increase as attendance at primary school increases, particularly among the parents of literate children. Functional literacy programs need to accommodate the many diverse motivations of adults, who may be attending to keep up with their children. Adult literacy classes may also be attended by adults who left school at different ages, necessitating a flexible application of curriculum to accommodate differences in skill and confidence levels. These differences may also provide participants with the opportunity to experience how skills can be transferred to the learning of other languages for other purposes.

By using resources appropriately, governments have political and legal means to influence motivation to become literate, including the exercise of rights of citizenship in voting, property ownership, taxes, and other legal obligations.

Social Factors Contributing to a Literacy Environment

The degree to which social institutions and groups contribute to an environment that reinforces motivation for literacy, can be seen in their use of printed materials, complex language for communication, and requirements for physical transportation. Mass media is associated with higher levels of literacy where printed matter is easily and readily accessible, though the relationship of radio and film to literacy remains less clear. Personal mobility and confidence to travel also seem to be associated with higher levels of literacy.

Influence of Linguistic Factors

The state of development of a particular language depends on a written form and the degree of modernization and standardization. The first criterion for acquiring literacy is the choice and use of a commonly accepted orthography. The second includes the ability of the language to develop and modernize first, by being widely understood; second, by meeting needs for new vocabulary; and third, by being usable for the translation of other languages in wider use. The third criterion, standardization, involves the establishment of a wider norm for language use that supersedes local languages. Dictionaries and grammars help promote learning the standardized language.

When introducing new vocabulary to local settings, practitioners need to take account of local variations in speaking and the positive effects of sharing, learning and developing new terms for wider acceptance. Developing a written form of a local language can serve as an empowering experience to those who learn literacy skills in it. Introducing literacy in a language of wider communication makes it more difficult for a group of learners to relate the language to their personal experience and use it intimately. There are cases in former French colonies where the use of the vernacular form for literacy instruction was rejected on the grounds it retarded access to the larger society. Among Africans who speak English, there has developed opposition to the use of the vernacular because they believe it will preclude modernization associated with English.

The whole task of codifying words is a complex undertaking that requires the careful attention of adult literacy specialists in mediating at several levels. On one level, they need to find out what languages are in common use. On another, they need to work with government to see what local forms are acceptable for publication, especially considering aims for national integration and local needs. A fourth criterion is the presence of positive attitudes towards the languages of literacy. Opposition toward literacy acquisition is affected by different contextual and historical factors which literacy specialists need to be aware of. The final criterion for individual motivation for literacy involves prior levels of oral fluency. Individuals either need to be orally fluent in the language of literacy before being able to read and write, or they need to be literate in one language before becoming literate in another.

CHAPTER V.

PERCEPTION: PERSONAL VALUES, SELF-AWARENESS, AND OCCUPATIONAL CONCEPTS WHICH INFLUENCE THE LEARNER'S ACQUISITION OF LITERACY

Two points are developed in this chapter: (1) learner perception of the value of literacy is a major variable in the motivation to acquire new levels, and (2) this perception can be enhanced so that learners can better assess the connection between economic opportunities and literacy. The learner's self-concept seems to be intrinsically connected to perceptions of the value of literacy. Educators can therefore help learners develop a better awareness of opportunities available by understanding the attitudes and skills needed to participate in them.

Assumptions and Attitudes About the Nature of Economic Opportunities

Assumptions that underlie the discussion about self-concept, perception and participation in economic opportunities include the frequency with which economic opportunities change, the resulting necessity to move from one economic opportunity to another, and the importance of confidence in accepting responsibility to act in one's own best interests.

Attitudes that stress learning new skills are important for educators because changing jobs and acquiring new skills is a life-long necessity in an uncertain world. Literacy skills are a basic factor in the development of self-reliant attitudes that enable workers to transfer their skills to a variety of work settings. While the educator cannot prevent negative influences that are already found in home or work contexts, the educator can focus on those individuals who have access to new economic opportunities. In those cases where individuals are not constrained by environmental influences, educators can be of assistance in helping learners make the connection between literacy skills and economic opportunities.

Development of Self-Concept and Perception of Economic Opportunities

Considering the fact that most people do not take advantage of available economic opportunities, it seems necessary to explain the process whereby people determine what is to their good. This task implies individuals have the responsibility and power to choose and act on their own behalf. Since "traditional mentality" is seen by some as an obstacle to modernization, one must learn to adapt by becoming less rigid, more open, tolerant, and trusting of new ways and different people. The implication in this view is that in order to progress one has to break with the past.

Others, however, view this break as damaging to the individual. They question certain values and traits of the modern world, asking why a break from traditional ways is assumed to be necessarily beneficial. They instead argue members of traditional cultures can take advantage of economic opportunities without discarding their values. By directly addressing one's concept of what one is capable of doing in one's own context, one can motivate oneself to change without having to discard traditional values.

In order to explain how a person can determine what is beneficial, the educator can help in the effort to understand how self-concept (identity), environment (culture), and behavior influence each other. Important to understanding motivation is an understanding of how self-concept is formed. The individual forms personal identity by struggling to define self-identity, the self known to the individual; social identity, the conception a person has of others' view of him/her; and public identity, the way others actually view him/her. Within this framework, one strives to be what one would like to be and the self one thinks others perceive. Since various forces act on one's self-concept, developing awareness of them can help the individual adapt

behavior toward specific ends, in this case the acquisition of skills for economic benefit. Eight variables seem to be involved in the preparation to take advantage of economic opportunities.¹

- Variable 1. Awareness of personal characteristics in relation to curricular choices and occupational choices.
- Variable 2. Awareness of personal characteristics and educational requirements in relation to occupational choices.
- Variable 3. Ability to accurately identify strengths and weaknesses relating to educational and vocational choices.
- Variable 4. Accuracy of self-estimates of ability with respect to levels of actual achievement.
- Variable 5. Evidence used for self-appraisal.
- Variable 6. Awareness of interests and their relation to choice option.
- Variable 7. Awareness of values and their relation to occupational choices.
- Variable 8. Willingness to take responsibility for one's choices.

Literacy/vocational educators should recognize the importance of "identity work" in their effort to help learners explore their potentials and adjust their concepts of self to correspond to literacy and available opportunities.

¹W.D. Bribbons and P.R. Lohnes, Emerging Careers (New York: Teachers College Press, Columbia University Press, 1951). Paraphrased by Rupert N. Evans and Edwin L. Herr, Foundations of Vocational Education (Columbus, Ohio: Charles E. Merrill Publishing Company, 1978), pp. 161-2.

Enhancement of Perception of Economic Opportunities

Enhancing perception of economic opportunities occurs in the environment whenever particular ethnic groups prepare their children to assume specific economic roles. But voluntary attendance at a literacy program often means certain individuals aspire to move beyond their accustomed world. Their continued motivation may depend on the extent to which their self-concept, their potentials, and what they can actually do appears congruent to them. Maintaining congruency does not necessarily imply that vocational choices remain constant. Vocational and literacy counselors should strive to help learners develop a process to adjust their self-concept and potentials to fit changes in the opportunity environment. In some rural areas young workers have become very adept at functioning within a variety of trades by applying skills flexibly, using entrepreneurial initiatives and adapting successfully.

There is sound reason to believe individuals can be helped to develop decision-making frameworks to examine the consequences of particular choices. Methods of using information to predict, value, and decide what course to take can be developed as part of integrated literacy and vocational programs. Once learned, this skill can go a long way toward encouraging the kinds of attitudes and confidence for risk-taking.

Self-concept, information, and environmental reality seem to influence the learner's perception of opportunities and the need to acquire literacy skills. With a realistic view of one's capabilities to perform the skills required, the learner can best decide on the personal investment appropriate to acquiring literacy skills.

CHAPTER VI.

THE INSTRUCTIONAL PROGRAM AND THE LEARNER'S OCCUPATIONAL PERCEPTION

The points developed in this chapter are: (1) the present literacy program in the environment serves to influence motivation to acquire literacy skills; and (2) certain instructional methods, approaches, and information can enhance learner motivation. The chapter continues with an exploration of methods to help the learner assess economic opportunities, understand how to participate in them, and understand capacities to perform the skills necessary for participation.

Presence of an Appropriate Instructional Program

The fact that a literacy program opportunity exists seems to be a motivation for literacy skill acquisition. Villagers often walk miles to attend. In order to maintain commitment, however, the program's content and level need to be geared toward learners' needs to perceive the connection between literacy and economic opportunities. Knowledge about the economic success of program graduates serves as a powerful motivator for others to complete courses. Success rates are enhanced when literacy and skill training are closely tied to employment and other economic opportunities in the immediate environment. When participants see how certain skills relate to jobs or other economic activities, their commitment remains high. The extent to which programs fit the environment is an important consideration for motivating the changes that people actually undertake. Some programs build on motivations that are not directly economic. In each case these programs are also linked to specific learners and their context so that they can see themselves and their surroundings in a new light.

Integrated Literacy/Vocational Programs

Implementation of integrated literacy/vocational programs is difficult because instructors often need to become familiar with new content. Instruction needs to be connected to economic opportunities. And, requirements to coordinate programs with national plans are often imposed. In urban areas the connection with immediately realizable economic rewards is easier to make than in rural areas where cash incentives are not readily available. The rural literacy program planner has to identify the information and literacy skills which will help rural workers become more efficient and productive.

Learner Involvement in Integrated Literacy/Vocational Programs

For learners to effectively assess their own values, opportunities in their environment, risks they are willing to take and the benefits they wish to achieve, they need to be involved in the design and implementation of their instructional programs. Being involved has a positive impact on feelings of control (self-worth) and ensures a better "fit" between learners' needs and the instructional program. By seeing they have some control over the instructional process, learners will more likely feel they can influence their environments and act on opportunities. It is not easy for many instructors, who have not had the opportunity to supplement teaching skills with counselling and group dynamics, to involve learners in the learning process. It is often necessary for compromise between what is feasible and what is ideal.

Instructional Approaches in Integrated/Vocational Programs

Learners can be helped to gain an understanding of the connections between literacy and economic opportunity by program staff who are able to elaborate a course content with learners that emphasizes this connection; use instructional methods and materials which allow learners to explore the connection; and maintain a continual internal monitoring (formative evaluation) process to determine learner reaction to the program.

Establish Program Content. Developing a content that helps learners see the connection between literacy and economic opportunity means that planners and learners should determine what connections there are and what level of literacy skills are needed for effective participation in economic activities. In diversified economies the task involves identifying and describing the opportunities and the level of literacy required. The content becomes the concepts needed for work and the vocabulary those words needed on the job. In contexts less diversified it often takes the skill of an entrepreneur to identify potential learning incentives.

Approaches for developing course content can be seen along a continuum from high outside expert involvement on one extreme to a series of negotiated agreements between learners and teachers on the other. The latter assumes a great deal of trust in learners and teachers, which, considering low levels of resource support, may be the only feasible choice in developing course content. The former facilitates integration with national plans more easily, but is more costly and less effective in identifying local needs. The approach that allows content decisions to be made by teachers and learners has the potential of being more responsive to learner needs, but depends more on the facilitative skills of teachers. In considering these extreme positions,

planners will usually recommend some mixture of the two, depending on what resources are available to get content information. Program personnel must plan program content which:

- builds on economic opportunities present in the learners' environment;
- corresponds to the level of literacy required by those participating in the economic opportunities; and
- helps learners understand their economic efficiency can be enhanced by new levels of literacy.

Instructional Methods and Materials

In planning a program that takes learners' characteristics into account, program staff need to make use of methods and materials that involve learners in the structuring of their learning activities. Though programs which involve learners in the structuring process have often been effective, it is important to know that participatory methods may be unfamiliar to both instructors and learners. If these methods seem appropriate to the context, the question most often becomes one of training staff that actually are available. The training process should involve learners and instructors in the act of determining what they expect of themselves, what they have to contribute, and what opportunities exist for becoming comfortable with the methods. The extent to which learners can become primary actors in the task of curriculum strategy, content, design, structure and flow, materials development, teaching, training, and evaluation can go a long way towards building self-concept and motivation to act on the environment in a self-actualizing manner.¹

¹Excerpted and abbreviated from Lyra Srinivasan, Perspectives on Nonformal Adult Literacy (New York: World Education, 1977), pp. 72-74.

Instructional materials can be especially helpful to instructors in their efforts to apply participatory methods and integrate components of the skills/literacy program. Though some of the materials on the surface may seem "dictatorial," they actually serve to train teachers to encourage the participation of learners. After working with these materials, instructors are better able to overcome gaps in age, content knowledge, and experience with adult learners on their own.

Monitoring of the Program: Formative Evaluation

Since literacy programs should be designed to be as situation-specific as feasible, it is necessary to determine how well learners are being prepared to participate in economic opportunities. In theory and practice, learners need to be directly involved in the evaluative process. If learners feel a sense of ownership over the conduct of the program, their motivation to persist will likely be maintained. Formative evaluation, moreover, requires fewer outside resource commitments than more rigorously controlled formal methods. Program personnel need to develop skills in applying formative evaluation procedures.

In the evaluation process:

the learner should be responsible for skill acquisition, pursuit of economic opportunities and evaluations as needed;

the instructor should be responsible for developing skills and attitudes for teaching adults, a varied curriculum, requesting learner and administrator evaluation, and assessing appropriate skills and skill levels;

the program administrator should be responsible for determining if skills taught are timely and appropriate; for staff development; for assessing student achievement; and for follow-up activities.

CHAPTER VII.

ECONOMIC INCENTIVES AND MOTIVATION FOR LITERACY: MAJOR ISSUES, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents conclusions and recommendations drawn from research undertaken through the Literacy-Oriented Functional Education (LOFE) Project over the past three years.

Major Issues

How to maximize the motivation of small scale entrepreneurs to participate in literacy and practical skills trainings, take time away from daily business activities, and apply new information toward managing their daily economic activities constitute the major issues in linking literacy with economic improvement. Motivation depends on the learner to attribute economic value to the literacy skills taught and their relevance to the economic context. In this sense, research in literacy motivation shows:

- literacy skills have different utility in different contexts and are valued for more than one reason;
- the value of literacy is both objectively determined and subjectively perceived;
- economic motivation to become literate is linked with the motivation to pursue new economic activities;
- the value of acquiring literacy skills and the value of completing a literacy program are often difficult to distinguish from each other; and
- increased confidence and independence are usually associated with new literacy skills.

Conclusions

1. Literacy has value in reference to desired economic results. LOFE Project research indicates when entrepreneurs participated in defining the results they wanted from literacy instruction, they were able to see the linkage between literacy skills and their immediate economic activity. Program planners were aided by their participation in designing relevant training.

2. The economic value of literacy depends on the applicability and relevancy of those skills to specific and immediate entrepreneurial tasks. When project participants experienced immediate economic returns from participation in literacy training, they were motivated to acquire new literacy skills. Performance was higher when they had the opportunity to apply new skills to practical activities than when training exercises were more theoretical. Economic incentives in the form of profits and business expansion played a large part in helping learners appreciate the benefits of applying new literacy concepts to entrepreneurial activities.

3. The economic value of literacy can be seen when it increases opportunities or helps small business owners and producers overcome constraints they see in their personal context. The increased perception of being able to use literacy skills to overcome constraints in their own economic context seemed to be linked positively to past training experiences and current practice of innovative behaviors. Having the opportunity to explore economic activities, determine requisite literacy skills, and analyze group potential contributed to learners' increased awareness of new levels of literacy and the application to economic activities they could actually undertake. Newly acquired access to technical information in practical matters enabled them to deal with what they previously considered as constraints to specific economic undertakings.

4. There is demonstrable economic value to being literate when it can be shown that acquiring literacy skills increases likelihood of reaching an economic goal. Knowing firsthand that literacy skills being learned are to be put to use for their own economic benefit increases the personal stake learners feel in a program. This awareness can be facilitated by using participants of previous training as resources. In both LOFE field sites it was observed that whenever educational activities were combined with an emphasis on more production, participants found them to be more useful. The more immediate the economic benefits and activities were for learners, the stronger their perception they needed specific literacy skills.

5. The economic value entrepreneurs accord to literacy skills is linked to instructional activities which allow opportunities to practice those skills. The LOFE experiences showed value in instructional programs which provided participants with the opportunity to determine the economic value of literacy; required them to explore diverse ways to express the economic values of literacy; involved them in identifying the literacy skills needed to participate in economic activities; and developed critical decision making skills. The use of participatory methods enabled facilitators and participants to jointly design and carry out specific learning activities which focused on self-concept, economic opportunity analysis, identification of needed literacy skill levels, and the use of individual and group problem solving skills. LOFE experiences in Ecuador and Tunisia confirm that the economic value entrepreneurs accord to literacy depends on opportunities to practice those skills in training. The practical orientation to real life situations enabled participants to get out into the community to question their peers about the value

of specific literacy skills to them. This and other training exercises enabled participants to construct their own options for expansion and change and apply new literacy skills to other economic activities. Skills included cost-benefit analysis, risk exploration, and decision making. In sum, training provided participants with the opportunity to develop and apply new literacy skills as a tool to their immediate economic context.

Recommendations

1. If small enterprise development is to remain on the agenda, further study of the literacy needs of small entrepreneurs is necessary. Considering their small margin for risk and innovation, subsistence producers and economically marginal workers need to enhance their abilities to identify options, assess and reduce risks, and acquire information that helps them improve their economic context. It would be of value for literacy programmers to continue to develop effective ways to link business management issues with literacy skills.

2. Future program attempts to integrate literacy with practical skills training should be collaborative undertakings which places greater emphasis on learners as informants. Past tendencies to prescribe training before analyzing needs can be overcome by using collaborative methods that encourage learner participation in forming content and design.

3. Approaches to integrating literacy with practical skills training must reflect learner needs and local realities. The best way to learn to apply technical information to business management appears to be through a process of active inquiry and analysis of specific tasks requiring literacy. Learner motivation appears to be influenced by the level of learner involve-

ment in the examination of economic opportunities and learner identification of the specific literacy skills needed for participating in existing economic activities. Instructional programs most successful in helping learners make connections between economic opportunities and literacy skills focus on their self-concept, analysis of immediate economic opportunities, identification of requisite literacy skills, and increased initiative, participation, and use of individual and group resources.

4. Emphasis should be placed on literacy training which first develops oral language skills related to technical content. Learning new vocabulary and concepts, such as those found in accounting and business management, is facilitated by the development of oracy skills first. Literacy skills follow more readily when new concepts are understood beforehand.

5. Special emphasis must be given to the development of written numeracy skills in entrepreneurial training programs. Applying new accounting and inventory management practices depends on participants' abilities to carry out mathematical operations correctly.

6. Sufficient time must be allowed for instituting innovative programs which differ significantly from existing practice. Participatory training is often new to trainers and participants alike. Developing training materials using significant learner input has implications for motivation and program success, while reflecting goals that can be achieved in short time periods.

7. Additional practical research is needed to determine the appropriate mix of practical skills training, literacy training, and follow-up activities. Considering that some business management skills, such as inventory management, are occupation-specific, follow-up activities provide trainers and

participants the opportunities to assess the impact of training and to identify other areas of technical assistance needed.

8. Literacy-oriented training for small businessowners should be short term. When motivated, adults can achieve new levels of literacy quickly, as they balance learning with the daily pressures of running small businesses.