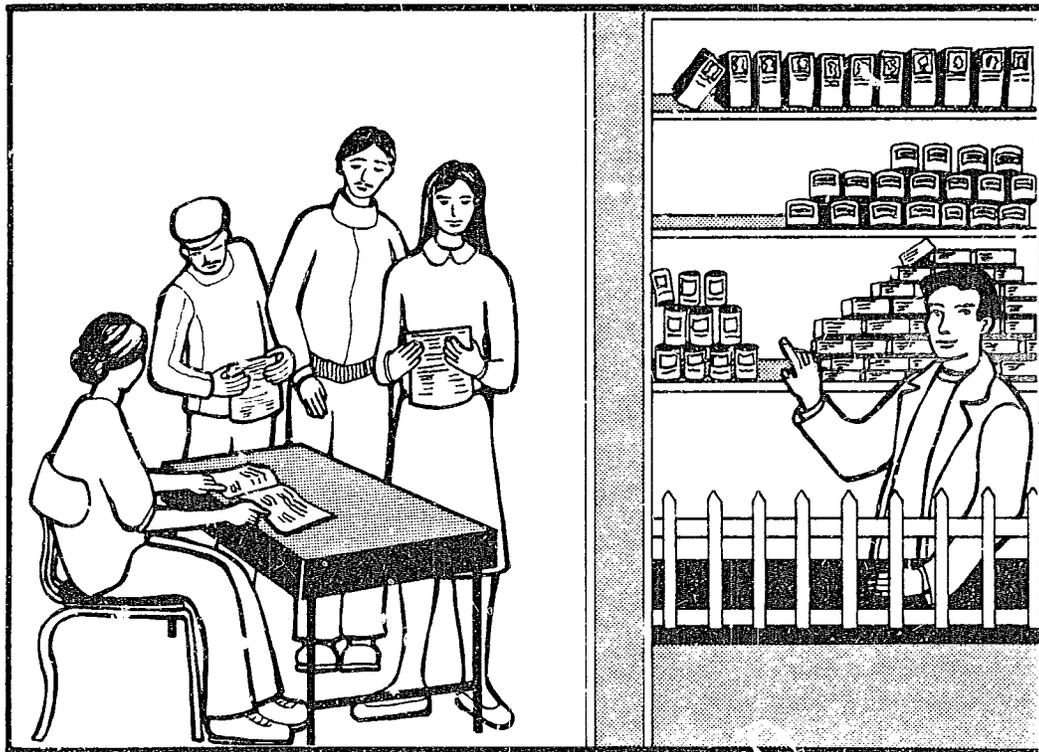


LINKING LITERACY TO BUSINESS MANAGEMENT SKILLS

Second Field Test Report: Literacy-Oriented
Functional Education Project

DSPE—C—0045



Agency for International
Development

Creative Associates
Washington, D.C.

Second Field Test Report
Literacy-Oriented Functional Education Project
DSPE-C-0045

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ABSTRACT

This report discusses training and research activities undertaken by the Loan and Advice Unit, Mellassine Integrated Development Project, Tunis, as part of Creative Associates' Literacy-Oriented Functional Education (LOFE) Project, DSPE-C-0045. The LOFE Project is designed to study how economic incentives serve as motivating factors for the acquisition of new levels of literacy skills by adults and out-of-school youth in practical skills training projects.

Section I of the document provides a description of the three-year LOFE Project. In Section II, discussion centers on the antecedents of the field research in Tunisia and an examination of research activities in the context of the Loan and Advice Unit's program for small businessowners in the Mellassine slum area. Section III describes implementation of field site activities with special attention given to site selection, delimiting the research tasks, examination of the social and economic context and identification of project clientele. Section IV examines specific training materials and includes six examples taken from trainer's guides developed by Project staff. Research findings from the five training workshops are reviewed in Section V and conclusions derived from Tunis site activities are presented.

Annexes include the research instruments (in French) used in the research. Draft training materials (in French) have been submitted separately.

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SECOND FIELD TEST REPORT
LITERACY-ORIENTED FUNCTIONAL EDUCATION PROJECT

I. PROJECT BACKGROUND INFORMATION

The Literacy-Oriented Functional Education (LOFE) Project (DSPE-C-U045) is a three-year project which examines how economic improvement serves as an incentive for adults and out-of-school youth to achieve new levels of literacy through participation in practical skills training programs. The contractor, Creative Associates, Inc., has designed two field research activities to explore:

- how economic incentives are defined in a given culture;
- which environmental factors most influence an individual's motivation to acquire new levels of literacy;
- how to effectively integrate literacy-oriented instruction into practical skills training programs; and
- how educational activities can be structured and implemented to heighten participants' awareness of the requisite literacy skills for a specific economic opportunity.

The LOFE Project has involved a three-phase approach to contract tasks. During the first nine months of the project, existing materials and documentation on the above mentioned factors were gathered and synthesized into a preliminary state-of-the-art review. Discussions with literacy and adult education practitioners in Africa, Asia, Latin America, Europe and the United States were used to further focus the review and refine several suggested hypotheses for testing in LDC settings.

In turn, the suggested research hypotheses were discussed with LDC practitioners prior to being tested in two Third world research settings. The first field-test was implemented in collaboration with the Fundación Ecuatoriana de Desarrollo between November, 1980 and June, 1981. The second

field test, undertaken in collaboration with the Municipality of Tunis' Mellassine Integrated Development Project from January to July, 1982, is the subject of this report.

During the third phase of the project, August to November, 1982, Creative Associate staff reviewed the findings from the two research sites and incorporated those findings into a revised state-of-the-art review and other project-related documentation. The English version of project documents are to be circulated widely to literacy practitioners and planners with synopses available in French and Spanish.

II. ANTECEDENTS OF THE RESEARCH

II.1 The Research Question

The second phase of the LOFE project was designed to test research hypotheses in field settings, i.e., LDC practical skills training programs. The research hypothesis was the following:

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

In addition, two secondary hypotheses were developed for examination.

They were:

- An individual's perception of economic opportunities in the immediate environment will influence his/her motivation to acquire new levels of literacy related to those economic opportunities.
- An individual's perception of the economic and social value ascribed to literacy by a society will influence his/her motivation to acquire new levels of literacy.

Both secondary hypotheses were confirmed by the Ecuadorian field test and were retained for study in Tunisia.

Through field research activities, Creative Associates, Inc. and LDC sub-contractors studied the relationships among:

- an individual's perception of economic opportunities;
- the social and economic value ascribed to literacy by a society;
- an educational treatment designed to impact on learner motivation to acquire new levels of literacy related to economic opportunities in the immediate environment; and
- new levels of literacy resulting from participation in the training program.

All four factors were studied in the context of ongoing practical skills training programs.

Key terms in the research were defined as follows:

- perception: an individual's view of his/her world in relation to economic, social and self-identity;
- economic incentives: economic goods which the individual desires and which are expected as a result of an action. The expected contribution of literacy to a better quality of life may be a better job, an ability to participate in modernizing sector activities, or the capability to survive in the marketplace among those who are literate and use their literacy to their own advantage;
- social and economic value of literacy: worth ascribed by individuals, institutions, organizations and government to the expected contribution of literacy to a better quality of life;
- literacy: skills involved in decoding and encoding written information and symbols accepted by society;
- new levels of literacy: new level of skills necessary for performance of specific (economic) tasks;
- educational treatment: a pedagogical intervention which emphasizes the individual's perception of economic opportunities and the relationships between those opportunities and the different levels of literacy necessary for fuller participation in those opportunities.

With respect to these factors, Creative Associates, and its two LDC sub-contractors concentrated research efforts on the following questions during the two field tests.

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

2. How does the economic and social value ascribed to literacy by a society (individuals, institutions, organizations and government) influence an individual's motivation to acquire new levels of literacy?
3. How does the perception of an economic opportunity motivate an individual to acquire new levels of literacy?
4. What influence does training which is participatory have on an individual's motivation to acquire new levels of literacy?

II.2. The Research Setting

With an interest in replicability of both research and training components of LOFE project activities, the following site selection criteria were applied in identifying practical skills training programs as potential LOFE research sites:

- project involvement in practical skills training programs for adults or out-of-school youth;
- existence of training materials which could be adapted in response to specific research concerns;
- use of the official language of the country in skills training programs;
- program participants drawn from the active work force age range, including both sexes and having basic literacy skills; and
- willingness of project staff to accommodate necessary interruptions which collaboration would bring.

In addition, AID-funded programs were given preference. And, as the field sites involved research, a major concern was that the organization selected should possess demonstrated evaluation and research capabilities or a willingness to have its staff trained in those areas.

Originally, the skills level criterion had been stated so as to include illiterate adults in the training programs under consideration. Visits to prospective sites in Ecuador and Tunisia and discussions with LDC project staff led to a refinement of the criterion to that listed above. Skills training project staff felt that little could be achieved in the short time allotted for the field tests (six months) if efforts were concentrated on working with illiterates. LDC project staff advocated strongly that the

contractor examine the potential of working with adults with low level literacy skills. Rather than starting at the point of letter and word recognition, they felt it necessary to begin with individuals past the basic literacy threshold.

II.3 Methodology

The contractor's philosophical orientation toward the research activities proposed for the two sites was influenced by several action research principles, most notably:

- research should be undertaken in full collaboration with local researchers and literacy/vocational skills specialists and only when its purposes and technical design were understood by collaborating local researchers;
- research should respond to the priorities and interests of local researchers and policy planners and should not jeopardize the program or the personal interests of local officials and researchers;
- research efforts should not disrupt organizational goals; specifically, any use of control groups should not require suspension or delay of any planned interventions with those groups;
- research activities should be responsive to learner needs and should be integrated into ongoing programs.

The research design proposed to sub-contracting organizations was a pre-test/post-test format which allowed for measurement of the impact of the educational intervention and assessment of participant attitudes and motivations before and after each training program.

The research operations involved were:

- Baseline survey - Designed to provide social and economic context data, the baseline survey was completed by sub-contractor staff prior to the inception of training activities. Data collected on prospective program participants were analyzed and used in the preparation and adaptation of training materials.
- Participant Entry Assessment: Entry level data on participants' existing literacy skills, technical skills and motivations for attending skills programs were assessed through two separate operations,

- a literacy pre-test, and
 - an entry level questionnaire
- Participant Exit Assessment: End-of-program data on increases in specific technical literacy skills, increased awareness of the literacy requirements of immediate economic opportunities and changes in participants' perceptions of the uses of those literacy skills in their current economic activities were gathered through three research operations;
 - a literacy post-test,
 - an exit level questionnaire administered individually to each participant; and
 - a follow-up questionnaire administered two to four weeks after training.

II.4. Training Materials

Training materials, as developed and modified by the LDC subcontractors and Creative Associates, had two major objectives. They were:

- to provide content and activities which permitted participant study and exploration of the requisite literacy skills for their immediate economic activities; and
- to use state-of-the-art adult learning philosophy and instructional techniques to involve learners more fully in the educational/training process.

Throughout the evolution of the training materials, Creative Associates proposed that two elements were crucial in increasing learner motivation to acquire new levels of literacy:

- an emphasis in each of the activities on learner involvement in the examination of economic opportunities; and
- the learners' exploration and identification of the specific literacy skills needed to participate in these activities.

The proposed instructional focus thus constituted Creative Associates' understanding of what was required to aid the learner in making the connections between immediate economic opportunities and resultant gains and the levels of literacy required to participate in those economic activities.

The training activities involved in the two field sites were designed to introduce:

- formative evaluation procedures for internal monitoring of increased participant involvement, greater use of diverse teaching methods by instructors and effective introduction and implementation of learning activities by instructors;
- investigation procedures for establishing relevant instructional content through which economic opportunities and the literacy skills needed for participation in those opportunities could be identified;
- a procedure through which instructional materials could be analyzed, revised and augmented by the instructors;
- staff training in a variety of instructional techniques; and
- pre- and post-testing procedures through which immediate participant progress could be measured.

In each field site, the content of the training materials was to focus on the economic gains/savings to be achieved through the application of specific literacy skills relevant to economic opportunities in the immediate environment. For this reason, training materials were structured to ensure the learners' personal involvement in the exploration of their existing economic activities and of how new levels of literacy could be of direct benefit to them in their work. Thus, learners and trainers assessed existing economic opportunities together; identified the skills needed by learners to maximize their involvement; and worked together to develop the required literacy skills.

The processes involved in developing the training materials and their implementation are described in Section III and IV.

III. IMPLEMENTATION OF SECOND SITE FIELD RESEARCH ACTIVITIES

In this section, the discussion focuses on planning and implementation of field site activities with the Loan and Advice Unit of the Mellassine Integrated Development Project, Tunis. Specific points discussed include:

- the selection of the sub-contractor;
- the adaptation of the research design and questions to sub-contractor needs, interests and priorities;
- the research setting, the training workshops and participants;
- the development of training materials; and
- the conduct of the research within the context of the Loan and Advice Unit's training program for small enterprise owners.

III.1 Selecting the Site ...

During the first phase of the LOFE project, Creative Associates and ST/ED identified a number of countries for possible field sites. Potential field sites were visited and the LOFE project was discussed with USAID missions and LDC institutions.

In November 1979, Creative Associates staff visited Tunisia to discuss LOFE project possibilities with USAID/Tunis. An urban redevelopment project located in a slum in the south of Tunis, the AID-funded Mellassine Integrated Development Project, was suggested and meetings were held with project staff.

Subsequent correspondence between Creative Associates, USAID/Tunis and the Resident Advisor of the Mellassine Project assessed the relevance of LOFE research to Mellassine Project objectives as well as possibilities for situating LOFE activities within on-going Mellassine programs. Following Tunisian development of a detailed implementation plan for each component of the Mellassine project in the summer of 1980, Creative Associates staff members were invited to Tunis in September 1980 to further explore possible collaboration.

In late 1980, the initiative for the activity was placed in the hands of the Mellassine Project as its personnel studied the proposed six to nine month contract possibilities under the LOFE Project. LOFE Project activities were proposed within the context of the Mellassine Project's Loan and Advice Unit, which offers both loans and technical advice services to small business-

owners in the zone. LOFE activities were to be conducted only in the advice component of the program.

By February 1981, the Loan and Advice Unit was in place, although not completely functioning. Two Tunisian civil servants, an urban extension agent and a statistician, were assigned to the group. In May 1981, the appointments of the two remaining staff members, a small business management advisor and an accountant/economist, were approved and planning for the loan and advice program began in earnest.

In June 1981, the Municipality of Tunis provided Creative Associates with a formal letter of interest and an invitation to come to Tunis for site negotiations. From August 7-14, 1981 the LOFE Project Director was in Tunis, during which time:

- Mellassine Project Staff and Creative Associates reached a mutual understanding of the LOFE research focus and requirements;
- a subcontract was drafted;
- a draft workplan was developed for the period of the subcontract; and
- a training design was elaborated for both the Loan and Advice staff and project clientele.

A final agreement for the collaborative activity was signed in December 1981 by the Mayor of Tunis and Creative Associates, Inc.

III.2. Delimiting the Research Tasks ...

During a visit to Tunisia in 1981, the LOFE Project Director discussed the central research hypothesis and the suggested research design with staff of the Mellassine Project. Once agreement was reached on the basic principles underlying the research, the research design was adapted to the training context. Research operations were reviewed and integrated into an overall training design to assure that each operation contributed to the implementation of the skills training to be offered. Research instruments were discussed, then elaborated in French for translation into Arabic.

An underlying theme throughout this adaptation process was that of the meaning given to the word "literacy" in the activity. As prospective participants in the Advice Program's training activities were individuals with low level literacy skills and not illiterates, Project staff talked in terms of "technical literacy" or "business literacy." Mellassine staff stressed that "conventional literacy instruction" was neither possible during the limited time available for the field test nor feasible given the short-term nature of training programs, i.e., 22 hours in one week. Project staff felt that by concentrating on "the new levels of literacy/technical information" necessary for an individual's fuller participation in an existing economic activity, meaningful short-term training could be offered to small businessowners in the area.

III.3. Defining the Social and Economic Context ...

Located in the south of Tunis, Mellassine is an urban slum area with a population of approximately 50,000. The area developed as a result of rural-urban migration beginning in the 1940's and continues to attract new residents due to its proximity to the center of Tunis. Over half of the inhabitants of Mellassine are under 20 years of age. The population density is 1.8 family units per lodging, with an average of 10.3 persons. The residents of the Mellassine area are primarily skilled and unskilled laborers, employed in the production of handcrafts, running small businesses or working as day laborers without regular employment. Seventy percent (70%) of the working population is employed outside the Mellassine zone.

There is little diversity in the economic activities in the Mellassine area - small shops, carpentry, metal work, bakery, mechanical and electrical work. These individual or family economic activities are generally small in size and rarely employ more than ten people. Further, they are not integrated

into the modern sector and have little contact with banks. Many fail to meet the legal and administrative operating requirements under current government regulations. It is these small enterprises and their technical assistance requirements which were the focus of this research as well as the recipients of services offered by the Mellassine Integrated Development Project.

The goals of the AID-funded Mellassine Project are:

- improvement of economic and social conditions in the zone;
- creation of jobs;
- reduction of unemployment;
- diversification of economic activities; and
- increase in revenues and improvement of entrepreneurial skills through the provision of credit and advice.

The last of these goals is being addressed through the Project's Small Business Loan and Advice Program. The specific objectives of the Loan and Advice Program are:

1. Improvement of economic structures within the zone through the provision of short-term loans and the delivery of technical assistance related to:
 - creating jobs;
 - improving the skills of small businessmen;
 - improving the quality of services offered to small businesses; and
 - increasing revenues of small businesses.
2. Encouragement of the participation of Tunisian financial and technical assistance organizations in programs assisting small businesses through:
 - the development and implementation of a coordinated system for granting loans and delivering technical assistance; and
 - the development of techniques for evaluating small enterprises.
3. Acquisition of baseline data on the functioning and economic status of small businesses in the area.

The Business Loan and Advice Team undertakes activities in the areas of training, liaison and research. Training activities include short workshops on accounting, business finance, inventory management, business math and business literacy. In addition, specific technical assistance is offered on problems peculiar to small businesses. On-site business advice and

consultation, assistance with loan requests and applications and the preparation of training materials for use with small enterprise owners round out the team's training offerings.

The advice team provides valuable liaison services between Mellassine entrepreneurs and stata, parastatal and private organizations. In addition, the team facilitate entrepreneur access to the services of experts.

Research is a basic focus of the team's activities as the needs of small enterprises in the Mellassine area can only be learned through extensive study. Since 1980, the team has conducted a series of mini-research activities on the development and functioning of small businesses, the research effort undertaken in collaboration with Creative Associates among them.

Advice services are geared to a clientele with the following general profile:

- numerous (400)
- apparent concentration in specific areas of the slum
- low educational level (large portion illiterate; those with formal education reported an average 1-3 years of schooling)
- predominant use of Arabic for all transactions
- enterprises for most part are marginal and family concerns
- low income from enterprises
- little if any contact with commercial institutions
- low interest in training due to age or self-reported lack of schooling.

III.4. Establishing a Training Design ...

Between February 1 and June 20, 1982, the Loan and Advice Unit conducted five training workshops for small businessowners from the Mellassine Project zone. Three workshops were offered on accounting for small businesses and two were organized on inventory management for small industries with the choice of workshop themes having been based on the expressed interests of prospective participants.

Each training module was presented in six sessions of three hours each with an additional four hours scheduled over two follow-up sessions. The six initial sessions were presented at Project training facilities as was the second of the follow-up sessions. The first follow-up session took the form of an on-site business consultancy in which trainers visited individual entrepreneurs at their places of business.

Forty-five (45) participants registered for the workshops. Of this number 42 were men and 3 were women. In two workshops, both on accounting, all participants attended the entire course. In the other workshops, there was a high rate of non-completion (on the average 50%) which was due to timing (preparations for the month of fasting, Ramahdan) and the decreased motivation on the part of participants who had applied for, but not yet received, loans from the Project.

The most common profession represented was carpentry, followed by individuals engaged in small commercial occupations such as grocers, green-grocers, butchers, electricians and plumbers. The following section describes program participants in greater detail.

III.5 Identifying Clientele ...

To better understand the socioeconomic context and learning needs of the entrepreneurs who are major beneficiaries of the Mellassine Integrated Development Project, as well as to assess the level of interest in loan and advice services, a survey of 437 enterprises was undertaken by the Mellassine Project in 1980. Additional baseline data adding to the profile of entrepreneurs in the Mellassine area were gathered in 1981. This sector sample provided detailed information on the needs and problems of 68 enterprise owners employing fewer than 10 persons. Finally, information from entry questionnaires and loan application interviews was used in furthering

developing the following profile of the entrepreneurs participating in project activities. Four salient characteristics of Mellassine entrepreneurs emerged from preliminary findings:

They are the owners of small enterprises. The number of businesses in the Mellassine area is large, (estimated at over 400), most of which are relatively unstable. Entrepreneurs often shift their economic activities from one business to another. Businesses are small in nature, generally employing only the owner or members of his or her immediate family. The volume of business is small, although there is a wide range between those that do the largest volume and those with the lowest. The businesses include primarily commercial activities, handcrafts and basic services. The most common economic activity in the zone is the corner grocery shop.

They are marginal entrepreneurs. In general, the businesses in the Mellassine zone are functioning illegally or on the margins of legality, with very few having either an operating license or a business registration. Even fewer reported that they paid social security. The limited amount of credit obtained by the entrepreneurs comes from family members or friends, with repayment through fixed installments. Occasionally, credit is extended by business associates. None of the entrepreneurs interviewed had any dealings with commercial credit institutions.

There are several factors contributing to this marginality:

- entrepreneurs have little or no understanding of legal and administrative standards, nor of credit sources which are available to them;
- those who are aware of credit resources, do not know the necessary procedures for obtaining credit;
- those who are aware of the procedures for accessing credit are intimidated by the bureaucracy and volume of frightening administrative paperwork; and
- finally, the characteristics of the entrepreneurs place them within a vicious cycle, since these very characteristics make them ineligible to receive commercial credit.

The entrepreneurs have limited technical skills and a low level of literacy skills. Research studies estimate that 60% of the entrepreneurs in the zone are illiterate. The remaining 40% possess varying levels of formal and informal instruction, with an average of 1-3 years of primary school. For many, primary school attendance had been 10 to 20 years in the past. From the entry level questionnaire it

was determined that of 25 participants in the accounting workshops only 13 regularly maintain an organized accounting ledger or record of expenditures and receipts; the others reported no accounting systems. Of those who maintained records, several employed the services of a second party to do so. Participants in the workshops on inventory management were, as a group, even less cognizant of such techniques with only two participants reporting the use of stock monitoring procedures.

In general, those entrepreneurs who did possess basic technical skills and knowledge in the areas of accounting and inventory management were aware of the value inherent in using such skills. They believed that people who employ similar techniques gain from doing so, "by succeeding in their undertakings and achieving a higher volume of business," "by being aware of their income and costs," "by being able to fill out invoices correctly" and "by understanding their profits."

The entrepreneurs need technical assistance. While entrepreneurs have a significant need for technical assistance, they often exhibited a negative attitude toward participating in technical assistance offerings. Of the 68 enterprises involved in the sector sample, only 18 expressed a need for technical assistance. The reasons for this reluctance included:

- age: Older businessowners were less inclined to invest in themselves by accepting technical assistance than were younger entrepreneurs;
- time: Small businessowners already invest inordinate amounts of time in their businesses in comparison with their level of income. Many felt that they could not risk losing potential business by being absent from their businesses for training. All noted that time was the most important cost to entrepreneurs who participate in any training exercise. Of 44 participants in the training workshops, only 4 stated they would be any place other than at work if they were not in the training sessions; and
- literacy/educational levels: Entrepreneurs felt that they needed at least a minimal level of literacy in order to take advantage of training opportunities.

III.6. Responding to Learner Needs ...

Data collected from baseline surveys implemented by the Mellassine Project provided a substantial basis for developing training materials responsive to the learning needs of small businessowners in the immediate

area. In addition, information gathered during interviews with area entrepreneurs seeking specific technical assistance was used to further focus the materials development process. Finally, small businessowners participated directly in the materials development process as resource people.

Training materials were structured around participatory instructional strategies which encouraged greater reliance on program participants as technical resource people. The learners were, at the same time, both object and subject of training activities which focused on:

- the enhancement of the learner's self-concept;
- an analysis of immediate economic opportunities;
- identification of the literacy levels required for participation in the immediate economic opportunities under study; and
- the increased initiative, participation and use of individual and collective resources.

Workshop sessions were planned to give each participant the opportunity to immediately apply the technical content presented, to develop action strategies and to exercise leadership roles and behaviors. The technical content of the training was integrated with specific literacy exercises. Once existing economic opportunities had been explored, learner motivation was not concentrated on production per se, but it was directed toward the acquisition of the necessary "technical" literacy skills to implement the newly presented technical content. Formative evaluation measures were closely linked with all offerings so that the training was easily adapted to the realities of each workshop group.

Training Trainers to be Responsive to Learner Needs

Being responsive to the learning needs of small businessowners served by the Mellasine Project meant that Trainers would need to:

- understand the economic and social context of the area;
- develop a realistic training design which would encourage participation;

- develop training materials with appropriate content and at an appropriate level for small businessowners in the area; and
- employ training and evaluation strategies which would allow for inevitable modification.

Thus, training of trainers became an initial concern in the Tunis site. In the section which follows, the process used in developing training materials is described. In a later section of this document, specific materials are examined in detail.

The Materials Development Process

Under Creative Associates' agreement with the Mellassine Project's Loan and Advice Team, technical assistance was provided for the collaborative development and testing of:

- literacy-oriented training materials on accounting for small businesses and inventory management for small industries;
- appropriate adult and nonformal education training methodologies for the delivery of practical skills training;
- formative evaluation methodologies to be incorporated in the Loan and Advice Unit's training practices; and
- a research design and appropriate research procedures which would measure the effectiveness of both training materials and training methods as well as gauge the motivation of individual participants to acquire new levels of literacy.

Training-of-Trainers Workshops: Two training activities conducted by Creative Associates and the Mellassine Project's Loan and Advice Unit were designed as training-of-trainers workshops. The general objectives of the workshops were:

- to finalize organizational and logistical issues related to LOFE Project research to be undertaken by the Unit;
- to assist the Unit in the development of a training design responsive to the technical assistance needs of their clientele;
- to work with Unit members on the development of a learner profile which could then be used to inform training decisions on content, sequencing and training schedule;

- to develop, with the active participation of Unit members, appropriate literacy-oriented training materials and methodologies for a training module on accounting for small enterprises;
- to development a second module, on inventory management for small industries, using the participatory process developed during the elaboration of the first module; and
- to assist the Unit with the development of a series of formative evaluation measures designed to aid them in making immediate and responsive changes in training content, methods and design.

Participants: The workshops were designed with the technical skills of the members of the Mellassine Integrated Development Project's Business Loan and Advice Program in mind. During visits to Tunis in August and September, 1981, the LOFE Project Director had extensive interviews with the team members and individual skills profiles were developed. The subcontractor's training staff had a range of professional and technical qualifications: accounting, economics and Tunisian business law; small enterprise management, law and international development; urban extension; and project management. Of the participants, two had previous teaching experience, although not with adults. All had first-hand exposure to working with individuals of the socio-economic and educational level of the small businessowners for whom training materials and methods were to be developed.

Training sessions were predominantly in French with movement into Arabic for specific materials development exercises and technical discussions. Interestingly enough, all participants quickly noted that their "technical" business management vocabulary was deficient in Arabic. Thus, an additional objective of all training sessions became that of keeping a running list of technical vocabulary in the two languages.

Schedule: The workshops were organized in two parts, with the first part devoted to organizational and logistical concerns surrounding the research to be undertaken; the refinement of research instruments; the

reporting of results; and the organization of workshops for Mellassine entrepreneurs.

In the second part of the workshops, training materials to be used with small businessowners in the Mellassine area were developed and training workshops in which the materials were to be tested with small businessowners were designed. As a prelude to the actual materials design, workshop participants first undertook to consolidate research data for decision making and use in elaborating a learner profile. This profile became the basis for decisions on training content, training schedule, methods and materials. The workshops also allowed for the review of translations of training materials with literacy specialists and the pretesting of training materials with prospective clients.

Methodology: As noted earlier, the major objectives of the workshop included the training of trainers as well as the development and modification of literacy-oriented materials and training methodologies for use with small businessowners. Creative Associates training team opted for a training design which allowed the subcontractor's staff to experience and experiment with a wide range of training opportunities. Both group and individual training experiences were designed with all activities stressing the role of group decision making and participation in the development of the training design and training materials. Particular attention was given to exercises which contributed to group cohesiveness and the role of group dynamics. As the group was small, each participant had ample opportunity to take responsibility for specific activities.

Workshop sessions began with a group objectives-setting exercise. The objectives were then posted in a prominent place for immediate reference. As an objective was achieved, it was discussed by the group and evaluated. At

the end of each session, the list of objectives was reviewed with discussion focusing on the progress to date as well as on decisions made concerning ways to proceed on work yet unfinished.

Following is an outline of the materials development exercises undertaken in the workshops:

Theme 1: Developing a Client Profile for Use in Making Decisions on Training Content, Training Design and Training Schedule

Exercise I: Identifying and Gathering Information on Small Businessowners

Exercise II: Elaborating a General Profile of Small Entrepreneurs in the Mellassine Area

Exercise III: Developing a Learner Profile for Practical Skills Training for Small Entrepreneurs in the Mellassine zone

Exercise IV: Using the Learner Profile to Shape Training Decisions

Step I: Defining General Characteristics of Responsive Training Methods and Design

Step II: Making Decisions on Major Content and Training Themes

Step III: Elaborating a Training Design

Step IV: Developing a Tentative Daily Training Schedule for Mellassine Entrepreneurs.

Theme 2: Choosing Appropriate Materials and Methods: Presentations on traditional (directive) and nondirective training methods (including posters, case studies, photoliterature, and role play)

Exercise I: What is a case study?

Exercise II: Developing a case study

Exercise III: Developing photoliterature

Exercise IV: Developing a role play

Theme 3: Elaborating Training Materials and Developing a Training Methodology

- Step I: Delimiting the Topic and Stating Objectives
- Step II: Sequencing the Content
- Step III: Assigning the Topic to Primary Resource Person
- Step IV: Developing the Sequences
- Step V: Discussing the Sequences in Plenary

III.7. Combining Research and Evaluation ...

Research operations were integral parts of the training design used in the five workshops, thus reinforcing the action research orientation of site activities. Entry level questionnaires, administered during the first workshop session, provided data to focus subsequent content offerings in other sequences. Participants' abilities to respond, both orally and in writing, were used to gauge the validity of self-reported literacy levels as well as participants' general level of knowledge about the specific content to be presented in the workshop.

The literacy pre-test results, also gathered in the first workshop session, were invaluable to trainers in their attempts to modify and adapt the level of their presentations. The pre-tests also helped trainers gauge participants' "technical literacy" or "business literacy" levels and modify the content of training presentations accordingly.

Both the exit level questionnaire and the literacy post-test were used to evaluate the effectiveness of training and participant achievement. In addition, both research operations provided formative evaluation data for the on-going revision of training materials and methods.

Thus, research operations for collecting data needed by Creative Associates on motivation, as well as on appropriate materials and methods, provided the basis for introducing and internalizing the concept of formative

evaluation in the sub-contractor's permanent training design. This institutionalization aspect of the activity, rather than having the research viewed as an additional set of tasks with no immediate benefits for the sub-contractor, proved to be an interesting by-product of LOFE field research activities.

IV. LOOKING AT THE TRAINING MATERIALS...

The words relevant and participatory would best characterize the training materials developed for use with small businessowners participating in the Tunis site. A review of existing materials left project staff with a firm conviction that small businessowners would need situation-specific training activities rather than those of a more general nature.

For that reason, materials were geared to the active exploration of the requisite literacy skills needed by small businessowners in their immediate economic activities. The technical content areas for the two modules, accounting and inventory management, were identified through interviews with prospective program participants. Each activity was developed at a literacy level commensurate with the average self-reported literacy level of program participants. And, efforts were made to develop alternative forms of each exercise to accommodate literacy levels lower than the identified average.

In addition, prototype materials which encouraged active participation of the businessowner-trainees were used in preference to more traditional, directive materials and methods. Through photoliterature, small businessowners were introduced to the key concepts of each module. Extensive use of group discussion allowed participants to develop sufficient oral skills

to facilitate the progression from oral expression to comprehension of printed training materials and then, to response through written work. Case studies and written exercises were complemented by both cashbook worksheets and inventory forms, thus allowing for an immediate application of concepts through practice.

As few of the Mellassine businessowners involved in the training programs had prior experience with either accounting or inventory practices, considerable emphasis was placed on the development of oral language skills related to the technical content. Only after participants exhibited an oral mastery of the accounting and inventory management concepts did trainers move on to the reading and writing exercises. Attention to this oracy-to-literacy sequence enabled trainers to introduce new vocabulary and concepts to small businessowners, thus fostering a relevant, and in this case often new, knowledge base needed for the comprehension of printed messages later in the training. In addition, the inclusion of an oracy-to-literacy sequence in the training of small businessowners provided trainers with the opportunity to capitalize on participants' "old" knowledge in order to teach the newly identified literacy skills for improving accounting and inventory management practices.

In the section which follows, specific learning exercises from the two modules are used to illustrate the oracy-to-literacy sequence included in the practical skills training. Additional materials show how reading and writing exercises reinforced the initial attempts to teach new business related vocabulary and concepts to businessowners with low level literacy skills.

IV.1 Introducing Key Concepts

Photoliterature was used for introducing key concepts in the module on inventory management. The photostory "Omar Loses a Client" depicts a small

grocer who often runs out of frequently requested goods and has difficulty in keeping his customers. The story uses black and white photographs with simple captions to illustrate how Omar's lack of good inventory management techniques cuts his sales and thus his profits. The objectives of the exercise were:

- to describe the characteristics of an enterprise which has poor inventory management procedures; and
- to describe the consequences of poor inventory management.

Example I presented below explains how the exercise using the photostory is facilitated.

Example I: Photostory- "Omar Loses A Client"*

1. The trainer explains that a photostory is a series of photos which illustrate a situation where there is a problem to be solved. He or she also notes that the photostory will be used as a starting point for a group discussion after all have read the short story.
2. When the photostory has been read aloud, participants are asked to read it to themselves. Then, the following question is asked: "What is the problem presented in the photostory?"
3. The trainer guides the discussion to assure that the following points emerge:
 - Omar's immediate problem is that he has lost a client.
 - A more fundamental problem is that he risks the loss of additional clients because he isn't managing his stock well.
 - Omar manages his stock poorly because:
 - he has run out of an item.
 - he didn't realize that he was out of the item;
 - he doesn't know how many of each item he has in stock;
 - he doesn't know where his additional stock of each item is kept;
 - his shop is poorly managed. . . .

*From: Trainer's Guide, Inventory Management for Small Enterprises, p.21 ff, developed by Loan and Advice Unit, Mellassine Integrated Development Project, 1982.

Example I cont'd

As participants suggest responses to the question, the trainer notes them on large sheets of paper, taking care to write clearly and to use the expressions as put forth by participants.

4. The trainer then reviews the photostory once again, highlighting participants' responses/suggestions to Omar's problem.

A second photostory was developed for the accounting module. Although it was similar in design, group discussion of the second photostory centered around four questions instead of one central question as in the above example. Use was made of a "what is the problem?" question to begin discussion, with more probing questions asked afterwards. The objectives of the probing questions were to:

- have participants define what they understood the word "accounting" to mean;
- find out how often participants felt accounting procedures should be carried out; and
- find out how they took care of the accounting needs in their respective businesses.

Reinforcing Key Concepts

Once it was established that participants understood the basic concepts behind the module and could express themselves orally about them, trainers concentrated their efforts on a gradual development of new literacy skills. In some instances, this progression involved case studies and classification or listing exercises, such as the ones described below.

The following case study was used in the first workshop session of the accounting module to stimulate discussion on the utility of accounting to small businessowners. Prior to using the case study, it was necessary for trainers to explain what a case study is and how it can be used to help area businessowners look at their own situations through an examination of the experiences of other individuals. The case study exercise was as follows:

Example II: Case Study- "Are Mansour's Plans Feasible?"*

Mansour is a carpenter in Mellassine. He works alone. Because his products are well made he has many customers. But, he is increasingly unable to meet his promised delivery dates. He wonders if he ought to buy a machine or hire a helper.

1. Two questions were used to guide the discussion after participants had read the case study and after trainers had read it aloud to participants. They were: 1. "What is Mansour's problem?" and 2. "What other uses are there for accounting procedures?"
2. Trainers were asked to facilitate the discussion in the following ways: Question 1. "What is Mansour's problem?" The discussion was to include the following points:
 - By looking beyond the immediate problem (that of Mansour not meeting his delivery dates) one can see that the issue is the decision to be made about either buying a machine or hiring a helper. That decision depends on Mansour's financial situation.
 - By assessing his monthly profits, Mansour will know if he can afford to pay cash for a machine, to make installment payments on a machine, or to pay the salary of an employee.
 - Accounting records or the keeping of such records can provide Mansour with the information he needs to make his decision.
3. Question 2. "What other uses are there for accounting procedures?" Reference is made to the photostory presented earlier in the accounting module and group discussion about it in order to elicit responses to this question on the functions of accounting. Responses were to include:
 - to know one's enterprise and its growth;
 - to have control over the enterprise (justify expenditures, receipts, avoid theft, etc);
 - to plan for expansion;
 - to better manage the business by avoiding waste, by knowing and controlling expenditures, by avoiding shortages, by making informed decisions;
 - to increase profits and production.

*From: Trainer's Guide, Accounting for Small Enterprises, p. 22 ff, developed by Loan and Advice Unit, Mellassine Integrated Development Project, 1982.

Session two of the accounting module dealt with the concept of expenses. The session was designed to provide participants with an understanding of the concept as well as a review of procedures for keeping an account of their expenditures. The objectives of the exercise were:

- to define the term expenditures
- to generate a list of monthly expenditures of small businessowners; and
- to categorize expenditures.

The list of expenditures generated in this exercise and their placement into categories of expenses served as an entry point to subsequent exercises. Participants had to first recognize expenses and be able to categorize them prior to entering them into a cash book. As the list was developed by each participant, linkages were established with real situations thus making record keeping an activity associated with one's own business. Example III below explains how the exercise was facilitated.

Example III: Listing and Categorizing Expenses*

1. Divide participants into small groups according to business interests.
2. Ask each group to define the concept "expenses" and record their definitions on the blackboard emphasizing the common elements among the various definitions.
3. Clarify any missing elements so as to arrive at a definition similar to:
 "Monetary expenses include all money which leaves the enterprise's cashbox. Non-monetary expenses include all merchandise which leaves the enterprise without being paid for."
4. Ask each group to record the types of monthly expenditures they have.
5. Transfer individual lists to the blackboard or large sheets of paper, checking to see that examples of all types of expenditures have been included.

...

*From: Trainer's Guide, Accounting for Small Businesses, p. 33 ff, developed by Loan and Advice Unit, Mellassine Integrated Development Project, 1982.

Example III cont'd

6. Ask participants to regroup their expenditures lists into like categories and facilitate discussion of expenses categories to include:
 - Expenditures related to current activities (over the past year)
 - purchase of raw materials
 - purchase of items for sale
 - salaries
 - rent
 - electricity, water, transport, insurance, telephone
 - equipment rental
 - taxes
 - upkeep
 - other supplies
 - other expenses
 - Investment expenditures (for the next year)
 - equipment
 - major upkeep
 - Repayment expenditures
 - reimbursement of business debts
 - loans
 - Personal expenses (emphasize the difference between the businessowner and his/her business)
 - pocket money
 - money for other family members
 - In-kind expenses
 - in-kind goods for personal use
 - gifts for customers
 - goods extended on credit.
7. Review categorization process with participants and allow for ample discussion time.

Similarly, case studies were used in the inventory management module as an effective means for reinforcing key concepts introduced through photoliterature and developed orally. The case study exercise presented as Example IV was used during the third session. The case study was used to present an example of a businessowner who has a problem in monitoring his stock and to encourage participant discussion of the problem. The objectives of the exercise were:

- to discuss the concept of inventory management and movement of merchandise; and
- to introduce concepts related to inventory management, to define these concepts and establish relationships among concepts.

Example IV: Case Study-"Ahmed the Grocer*"

Ahmed is a grocer in Mellassine. He stacks his cartons of goods in the rear of his shop. He stocks the shelves regularly from these cartons. He often finds that he has run out of a particular item, with none left on either the shelf or in the carton. How could he avoid this problem?

The exercise using the case study, "Ahmed the Grocer," was facilitated in the following manner:

1. Trainer explains that the case study describes a situation in which there is a problem to be solved.
2. Participants read the case study and then the trainer reads the study aloud verifying that all participants have understood all terms.
3. Trainer facilitates the discussion of the case study to assure that the following elements are discussed:
 - Ahmed's immediate problem is that he has run out of an item of merchandise. This results in loss of sales and a loss of profit. It could also cost him clients.
 - Even though Ahmed has a storeroom in back of his shop, he doesn't know how much of each item he has on hand nor how quickly the item moves.
 - To resolve this problem and to follow the movement of stock from the storeroom, Ahmed must come to understand the differences between stock on hand, initial stock and incoming stock. Each time stock is moved from the storeroom to the shelves, he must make note of that movement. Each time a new order arrives and is placed in the storeroom he must make note of that arrival.
4. Trainer uses simple examples to illustrate movement of stock concept, as well as ways in which to monitor stock movement. ■

IV.3 Applying Concepts through Written Exercises

Small businessowners were given several opportunities during the training workshops to apply new concepts and knowledge to practical situations linked to their immediate economic activities. Follow-up activities for both

*This discussion draws heavily on pages 30-32, Trainers Guide, Inventory Management for Small Enterprises, developed by the Loan and Advice Unit, Mellassine Integrated Development Project, 1982

of the case studies described above involved participant use of business forms. In the accounting module, participants learned how to design and use a simple cashbook to record income and expenses for a set period of time. Inventory forms designed for monitoring one product were used to reinforce the key concepts of the inventory management module.

The exercises based on the inventory sheets builds on a previous session which used the case study described above. As references to key concepts of stock on hand, initial stock, incoming stock and out-going stock were all fresh in participants minds, trainers were able to make an easy transition to the following written exercise explained in Example V. The objectives of the exercise were:

- to identify the components of a stock inventory sheet; and
- to design a stock inventory sheet.

Example V: Developing Stock Sheets*

1. Trainer refers participants to the case study of Ahmed the Grocer and their discussion of Ahmed's problems.
2. Movement of stock is discussed and key concepts of initial stock, stock on hand, incoming stock and outgoing stock are reviewed with participants explaining each term with examples.
3. Trainer asks participants how these concepts might all be brought together to help each businessowner keep track of his/her stock.
4. Trainers suggest the following format as one which could be useful to small businessowners (sheet is shown to participants in the form of a large poster)

Item of Merchandise: _____

Supplier: _____

Delivery Cycle: _____

. . .

*From: Trainer's Guide, Inventory Management for Small Enterprises, p. 38 ff., developed by Loan and Advice Unit, Mellassine Integrated Development Project, 1982.

Example V cont'd

Date	Description	Incoming	Outgoing	Stock on Hand

5. Trainer facilitates the discussion of the above form to bring out the following points:
 - An inventory sheet should be maintained for each item of merchandise and indicate the supplier for the items, the delivery cycle (e.g. time between placement of order and receipt of the merchandise)
 - Each transaction should be recorded on the inventory sheet and include:
 - the date of the transaction;
 - nature of the transaction;
 - the amount of the transaction; and
 - stock on hand following the transaction.
 - A separate column is used for each type of transaction. One column is used for incoming stock (+), one for out-going stock (-) and one for stock on hand. This approach helps to avoid errors.
6. Trainers help each participant copy the form onto sheets of paper, explaining that the newly copied forms will be used in the next exercise.

Trainers returned to a discussion of Ahmed the Grocer and participants were provided with detailed information on one item which Ahmed sells, cans of tomatoes. The participants worked individually, filling out the inventory sheets to record the movement of this one item of merchandise. Discussion followed with trainers checking completed sheets for accuracy.

This exercise of setting up and filling out an inventory sheet was returned to several sessions later in the training module. In the later exercise participants were asked to list the items of merchandise for which they would like to maintain inventory sheets. They were assisted in identifying major considerations in deciding which items are the most important ones requiring close monitoring:

- items which represent the greatest volume of business
- items which frequently have disruptions in supply
- items for which a disruption in supply would entail a halt in the entire operation.

Next the participants set up and filled out a stock inventory sheet for at least one of their items of merchandise, maintaining the sheet for several days. The inventory sheets were then reviewed by trainers and participants during the first follow-up session at the businessowner's shop.

The cashbook exercise built on previous exercises in which workshop participants had identified their monthly expenditures and defined categories of expenditures as well as classified them according to categories of the actual expenditures made by Daoud, the vegetable seller who is the subject of a short case study. This exercise was intended to give participants the opportunity to fill out a simple cashbook and is explained in Example VI.

Example VI: Cashbook Exercise*

1. Using the case study about Daoud, a vegetable seller, as a starting point, the trainer asks the group to reflect on ways of presenting information on expenditures in an organized manner.
2. The trainer facilitates the discussion, drawing out the following points:
 - The recording of expenditures should be done daily, in an organized manner using a cash book.
 - The businessowner should keep and classify supporting documentation (bills, receipts, etc.) in order to aid in verifying and auditing the operations.
 - The recording of expenditures should be done in such a way as to allow verification of operations and analysis of the nature of expenditures.
 - The recording of expenditures should allow a regular summary of operations.

A simplified cashbook for expenditures could look like this:

. . .

*From: Trainer's Guide, Accounting in Small Businesses, p. 31 ff. developed by Loan and Advice Unit, Mellassine Integrated Development Project, 1982.

Example VI cont'd

Date	Category (and Supporting Documentation)	Amount

For each operation, the cashbook gives the category of expenditure (with supporting documentation), the date and the amount.

- Ask the participants to fill out the cashbook to show Daoud's expenditures from the earlier case study:

Date	Category (and Supporting Documentation)	Amount
3/23/82	purchase of vegetables, bill no. ____	50, D
	transport, receipt no. ____	2,
	cigarettes and coffee	0,500
	loan to Ali	.1,
	vegetables for Fatma	1,500
	purchase of cashbox	10,
		<u>65,000 D</u>

- Emphasize the way figures are presented to make calculation easy and suggest separate columns for dinars and for millimes.
- Suggest that totals be recorded in a different color to avoid counting them twice.
- If the level and comprehension of the group permit the introduction of a more involved processes, ask them to critique the simplified cashbook. A clarifying question might be: "Does this cashbook illustrate expenditures by category?"
- Depending on participant literacy levels, ask the participants to reflect on a way to record expenditures by category; discuss their suggestions and propose the following format:

Date	Category (& Supporting Documentation)	Production Expenses	Investment Expenses	Repaymt Of Debts	Personal Expenses	Payment In Kind	Amount
3/23/82	purchase of -bill no.		50,000				50,000
	transport- receipt no.		2,000				2,000
	cigaretts & coffee					500	500
	loan to Al			1,000			1,000
	vegetables for Fatma					1,500	1,500
	purchase of cashbox		10,000				10,000

Example VI cont'd

8. Ask the group to fillout the cashbook to show Daoud's expenditures from the earlier case study (see figures above).
 9. Emphasize that the choice of headings/categories of expenditures depends upon the type of enterprise.
 10. Check participant cashbook sheets and assit participants with corrections or necessary modifications.
- 

The purpose of the six examples presented above has been to illustrate the progression involved in training materials developed for use with small businessowners in the Tunis training programs. As the examples show, initial exercises concentrated on the development of oral expression (oracy) skills related to the technical topics of the two training modules. Once these skills were developed, training exercises were focused on the acquisition of complementary writing and reading skills.

A complete trainer's guide for each of the modules in French is submitted for ST/ED examination with this document. Arabic versions of the two modules are forthcoming.

V. FINDINGS

Section II, "Antecedents of the Research," discussed four research questions which guided the LCD subcontractors and Creative Associates in their examination of economic incentives as motivating factors for the acquisition of new levels of literacy. In this section, those questions, and a fifth developed for study only in the Tunis site, are used to focus the discussion. Data presented in the discussion of each question were collected from entry and exit level questionnaires, literacy pre- and post-tests, training observations, trainer diaries, follow-up interviews and other project documentation.

Question 1: How does the social and economic value ascribed to literacy by a society (individuals, institutions and, government) influence an individual's motivation to acquire new levels of literacy?

Originally, the Mellassine Project's Loan and Advice Unit had planned to link technical assistance and advice for small businessowners directly to the receipt of loans. That is, each loan recipient would have been obliged to participate in technical assistance offerings. The advice component was designed to assist area entrepreneurs in accessing credit and resources as well as better managing their resources after receipt of a loan.

The original conception was seen as having dual constraints. First, program participation was to be obligatory, the results of which were seen as having possible negative impact on participant motivation. Second, several businessowners who were not interested in a loan were automatically excluded from technical assistance.

The team revised its original plans and designed a technical advice program with open participation. Of the total number of workshop participants, seven (7) were not loan applicants. Training was not obligatory and personal motivations were seen as the major factors encouraging participation.

An attempt was made to assess participants' motivations for attending the accounting and inventory management workshops. Two questions were included on this subject in the entry level questionnaire. The first, which dealt with reasons for participation, generated the following data:

Response	Workshop Theme	
	Accounting	Inventory Management
to become better informed	2	2
to learn something new	3	4
to become a better manager	2	1
to increase my profits	4	4
to improve my situation	3	2
to improve my physical surroundings	4	2
to obtain a loan	6	4
other	4	3

The second question dealt with the benefits which participants expected from attending the accounting and inventory management workshops. Their responses were:

Response	Workshop Theme	
	Accounting	Inventory Management
to become better informed	6	1
to learn something new	5	2
to become a better manager	0	1
to increase my profits	3	4
to improve my situation	0	2
to improve my physical surroundings	3	2
to have access to a loan	9	5
other	4	6

In examining the responses to the foregoing questions, the purely economic motivations appear incrementally if one groups the responses as follows:

- to become better informed and to learn something new;
- to become a better manager and increase my profits;
- to improve my situation and my physical surroundings; and
- to have access to a loan.

The first two responses above were given by 22 of 44 participants in the workshops, a finding which demonstrates the social and economic value placed by participants on the training offerings. The responses attest as well to individual motivation to acquire the new levels of literacy necessary to improve upon immediate economic activities. In addition, two participants thought that participation in the workshops would help them "succeed" in their enterprises while a third, a baker, thought that the training would help him improve the image he had of himself as a businessowner as well as improve the image others had of him.

Question 2: How does the perception of an economic opportunity motivate an individual to acquire new levels of literacy?

Training offered to Mellassine area businessowners demonstrated that productive economic activities can foster the need for literacy skills. The discussion under Question 1 above showed that participants were economically motivated to attend training sessions, with the two last responses "to improve my situation and my physical surroundings" and "to have access to a loan" being mentioned as frequently as the other two responses. This tendency demonstrated that perceptions of the economic gains to be acquired served as potent motivating factors.

At the end of the training sessions, participants rated practical application exercises, e.g., cashbook and inventory sheet presentations, as the most useful of those included in the workshops. They noted that the application of those exercises to their real life situations helped them further realize the economic benefits to be derived from the training. It is interesting to note that this exit level assessment of utility and potential applicability was not substantiated by a high rate of actual application observed during follow up visits with businessowners two weeks after the

training session. The few who had instituted new or modified accounting practices or who were using the inventory sheets were those already exhibiting other innovative business management behaviors.

For many participants, access to credit was perceived as the motivating economic opportunity. Businessowners learned through interviews with project staff that they had to demonstrate their net worth, evidence of stock on hand and projected use for each loan. For many, who had neither accounting systems nor stock inventory procedures, the prospects of establishing such practices figured heavily in motivating participation. This was particularly noticeable in the first four workshops where attendance remained high throughout. In the fifth workshop, which was held shortly after a major confrontation between disgruntled businessowners, project staff and local elected authorities, attendance dropped dramatically when businessowners learned that it would be another two to three months before the first loans would be disbursed by the Mellassine Project.

Question 3: How does an individual in a skills training program perceive of economic incentives related to the skills training he or she is receiving?

Participants' expectations of training were assessed through an entry level questionnaire item, "What do you expect to learn from this workshop?" Responses can be grouped as follows:

Response	Workshop Theme	
	Accounting	Inventory Management
Accounting	4	1
Business Management Techniques	3	3
How to build up my capital or obtain a loan	7	3
Don't know	2	1
No response	2	6
Other	3	1

From the foregoing, it is observed that participants were most interested in getting information on how to build up their capital, including

how to access the necessary credit or loans for purchasing equipment or stock. Despite this one-sided interest there was considerable interest in obtaining other information: eleven (11) individuals wanted information on accounting and business management techniques with four (4) indicating an interest in business law, legal issues and marketing.

The expectations noted above were similar to participants' responses to an additional entry level questionnaire item, "What are your major needs for improving your business?" Responses were as follows:

Response	Workshop Theme		TOTAL
	Accounting	Inventory Management	
New information and new business techniques	11	9	20
Assistance with management	6	6	12
Additional capital	23	17	40
Other:			
equipment	4	1	5
stock (merchandise)	2	2	4
land	1	1	2
locale	1		1

A detailed analysis of the questionnaires showed that although purely material needs (capital, equipment, merchandise, land and locale) were mentioned 52 times, needs related to training for better business management appeared among the responses of 32 of the 44 small businessowners.

Even though there was frequent mention of the need for technical assistance and training, participants' level of knowledge about accounting and inventory management issues was such that they generally had difficulty in specifying the content for the training they wanted or knowing what particular skills and techniques would be beneficial. This was particularly the case with participant responses to another entry level questionnaire item, "What specific information do you need on accounting (or inventory management) to make your business operation more efficient?"

The most frequent response was "I don't know. It is up to you to decide." There was a large number of responses under the "other" category which were also of a vague nature; "everything that relates to my work," "new ideas," "management," and "new information," among them. At the same time though, there were workshop participants who were precise about their needs: "how to measure wood and calculate the cost of a window or door," "how to figure percentages, taxes and social security payments," "how to plan for seasonal availability of stock," and "how to better manage retailing of perishable goods."

This generally observed tendency among participants to say that trainers should be the ones defining content was dealt with directly through the methodological approach taken to training and through the materials development process. Training methods involved participants in the design, implementation and evaluation of training activities. Participants examined their current economic activities to identify which specific business literacy skills could help them. Training activities were then developed to address those particular needs. In all activities, the short term economic benefits to be derived from the training were stressed.

Despite this short-term concentrated focus on developing oral expression skills related to technical content areas, applying new information to concrete situations through writing and reading exercises and evaluating learning experiences, data from the exit level questionnaire indicated that participants continued to have difficulty in being precise about their learning needs. In one case, even though eight (8) of 14 participants indicated that they would like additional business-related assistance, only one was explicit about the type of assistance he required. He wanted help in

learning how to calculate his profit margins on the products he sold in his corner grocery.

Question 4: What influence does participatory training have on an individual's motivation to acquire new levels of literacy?

In examining the influence of both training methods and content on individual motivation, trainers looked at participants' perceptions of existing economic activities and their perceptions of how training could help them in taking fuller advantage of those opportunities. Items 8 and 10 on the entry level questionnaire provided data for this analysis.

The responses to Item 8, "Do you think that businessowners who use the same accounting methods as you use are successful?", were always "yes." Only those participants who were currently using some accounting method (9 out of 26) were asked to respond. In each instance, they expressed an awareness of the relationship between accounting practices and business success. According to the respondents, businessowners who used good accounting and management practices were successful because:

- "they got things done";
- "they knew what their income was";
- "they kept records";
- "they knew what their profit margin was";
- "they had employees";
- "they had sizeable business concerns"; and
- "they managed well".

Similar responses from accounting workshop participants were elicited through Item 10 of the same questionnaire, "How do you think new information on accounting can help you improve your business?" Fourteen of 22 responses focused on:

- Planning: "helping me use my current economic situation to plan for the future" and "helping me to improve my physical surroundings"
- Management: "organizing my work better," "improving my management skills" and "arriving at desired profits"
- Specific skills: "learning how to calculate linear measurements," "learning how to keep a cashbook" and "developing a system for classifying and filing receipts."

The majority of participants in the inventory management workshop had had no previous exposure to inventory management procedures. This lack of experience was mirrored in responses to Items 8 and 10 on the entry level questionnaire. Ten (10) participants gave no response to either question with three (3) others giving vague responses. Four (4) participants replied that inventory management procedures would help them "resolve problems related to sales" but that it would be of no use to them "if it were scientific." Two (2) participants felt that inventory management procedures would help them "increase their profits."

Data on participants' expectations and their assessment of the utility of the training were also gathered through the exit level questionnaire. That data can be synthesized as follows:

a) In the accounting workshops, nine (9) of 17 participants responded that they had been most interested in the content of the training, while eight (8) had been more interested in the methodologies used to present the content. Four participants noted that they had profited from the entire offering and found it hard to separate content from methodology in their appraisal.

b) Fifteen of the 17 small businessowners were of the opinion that the training programs had met their expectations. Two (2) did not respond to the question. Of the 15 who responded positively, eight (8) noted that the new information presented was of direct application to their current economic activities while the remaining seven (7) were more conservative with their estimation. All 15 felt that the workshop experience would help them to become better managers of their small business concerns.

c) On the whole, participants voiced an interest in all the sessions, with the sessions on expenses and receipts and the cashbook having generated specific commentary.

d) All participants felt that they could adequately explain the key concepts and key words used in the module. This self-report was verified in written and oral exercises which constituted the literacy post-test administered in the last training session of the week.

In a final evaluation exercise participants were asked to discuss what they had liked about the workshops and how they thought future workshops could be improved. Following are participant comments on what they liked about the workshops. The translations are literal so as to capture participants' modes of expression.

- "useful lessons; permitted my knowledge on accounting to enter discussions";
- "lessons encouraging a new way of organizing my working and using information which I used to ignore";
- "the methodology used was good to allow all points of view";
- "I learned how to manage my business more effectively";
- "I learned how to improve my accounting procedures. Now I have no excuse.";
- "This will help me make more money.";
- "Accounting and how to use it, now that's useful for all businessowners";
- "This interest shown in small businessowners will help them improve their financial situation. It responds to each one's hope."

Question 5: What changes does participation in training have on trainee attitudes and skills?

The utility of a training workshop should not only be evaluated by trainees but also, and perhaps more objectively so, by observers and the training team. For this reason, the Tunisian sub-contractor opted for this fifth question for study and discussion. Data for this discussion were gathered from three major sources: literacy pre- and post-tests and follow-up sessions. All three provided program organizers with information on what changes took place in participant attitudes and skills levels.

A comparison of pre-test and post-test performance demonstrates that changes which took place, in general across the range of participants, can be grouped as follows:

- The level of oral expression skills (oracy) in treating the key concepts developed in the two modules improved significantly. Participants who had confused the concepts of income, profit, receipts and net income on the pre-test were able to distinguish correctly among the terms at the time of the post-test.

- Learning to copy the cashbook format and that of the inventory sheets was quickly accomplished. Significant progress was made by most participants in acquiring the skills needed for completing the forms, especially in correctly aligning figures. If figures are improperly aligned, mathematical operations are usually incorrect. Ability to perform mathematical operations remained an area of concern throughout the workshops and needed continued attention.
- Groups were not homogenous in either oral expression skills levels or in technical skills. Yet, through an emphasis on group activity and group discussion, all members were able to participate in workshop offerings.

Follow-up activities indicated that few participants had put their new skills into practice within a two week period after the training ended. In most instances, small businessowners told trainers they had not had the time to do so. Others indicated that they planned to do so, while a few openly admitted they had reservations about instituting changes which might result in additional costs. The limited data gathered from follow-up activities provided the following insights:

- Three participants had "radically" changed their attitudes. Two of the three (a carpenter and a plumber) came to the accounting workshops with no knowledge of accounting procedures. They diligently traced their cashbooks and had been entering expenses and receipts on a daily basis since the workshop. The carpenter, who had a large volume of business, talked at length to trainers about how this new "practice" was helping him. The third participant, a young soft drink retailer who already had an expense book prior to the workshop, had reorganized it and begun to follow his inventory more closely.
- Seven participants continued to use the same accounting systems as they had employed previously. Some indicated that the module had assured them that their methods were adequate. Others noted they had made small changes or improvements in their systems as a result of their participation in the module.
- Five participants exhibited a resistance to instituting the practices suggested in the workshop. One of the five was illiterate and the other four felt that their businesses were so small that they should devote their efforts to survival.

Tentative Conclusions

Improved Technical and Business Literacy Skills:

Project experiences with and learner performance on literacy pre- and post-measures showed that technical and business literacy skills could be learned in short periods of time.

- Participants demonstrated significant progress in acquiring new levels of literacy (reading and writing skills) once key concepts had been mastered orally.
- Performance was higher on reading and writing tasks which involved the practical application of key concepts to immediate economic activities than in those exercises which were more theoretical in nature.
- Participants were observed to exhibit a greater sense of self confidence in approaching reading and writing tasks in post-test measures involving the practical application of training content.

Role of Economic Incentives as Motivating Factors in Literacy Acquisition:

Project findings suggest that economic incentives play a large role in motivating individuals to acquire new levels of literacy. This is particularly true when participants see and experience immediate economic returns from their participation in training.

- Perceived economic incentives included not only increases in profit but also physical expansion of one's business, diversification of inventory and access to credit.
- Small businessowners are often caught up in survival issues which preclude their examination of small changes which could result in significant benefits for their businesses.
- Those businessowners with past educational/training experiences were more receptive to both training content and processes and exhibited a greater willingness to take the risks involved in instituting change.

Linking Literacy to Business Management Skills:

Project findings suggest that it is possible to make inroads in linking literacy to business management skills through short-term training. The success of such efforts appears to be tied to the educational level of participants, with basic literacy skills being a prerequisite.

- The more immediate the economic payoffs for participants the greater the interest in identifying the literacy skills necessary for improving one's immediate economic activity.
- Considerable attention needs to be given to the development of oral expression skills (oracy) thus facilitating the movement from discussion of new concepts to encoding written material treating the concepts.

The Research Hypothesis:

These findings suggest that minimum levels of basic literacy and business management skills are necessary for the hypotheses to be confirmed.

- When both basic literacy and business management skills were absent, comprehension of and eventual application of training content to existing business activities was nil.
- The presence of basic literacy skills facilitated both comprehension of training content and its application to existing business practices.
- Active exploration of the individual's existing business information needs not only heightened participants' perceptions of the uses of literacy skills, but offered replicable processes for accessing information.

ANNEXES

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QUESTIONNAIRE D'ENTREE

Module :

Date :

Formateur :

Nom :

Adresse :

Niveau d'Instruction :

Activité :

Vous avez choisi de participer à ce programme de conseils sur la gestion des stocks pour petits entrepreneurs. Avant de commencer ce programme j'aimerais vous poser brièvement quelques questions. Vos réponses à ces questions nous seront utiles dans le développement de cet atelier de formation.

1. Quelles sont vos propres raisons de vouloir participer à cet atelier sur la gestion des stocks pour petits entrepreneurs ?

2. Avez-vous jamais participé à d'autres ateliers de formation ayant un rapport avec votre travail ou vos affaires
 a. Oui
 b. Non
- 2 a. Si oui, lesquels et où ?
3. Etiez-vous satisfait de ce que vous aviez appris alors ?
 a. Oui
 b. Non
- 3 a. Si oui, en quoi votre formation vous a-t-elle aidé dans votre propre travail ?
- 3 b. Dans la négative, pourquoi ?

.../....

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4. En vue d'améliorer votre travail quels sont vos besoins majeurs ?
 - a) Nouvelle information,
 - b) Compétences techniques spécifiques,
 - c) Apports financiers,
 - d) Assistance administrative,
 - e) Pas de besoins particuliers,
 - f) Autres (précisez s'il vous plaît).

 5. Qu'espérez-vous apprendre dans cet atelier ?

 6. Quel genre de système de gestion de stock employez-vous dans vos affaires ?

 7. Connaissez-vous d'autres entrepreneurs à Mellassine qui utilisent un système de gestion des stocks similaire au vôtre ?
 - (a) Oui
 - (b) Non

 8. Pensez-vous qu'ils sont des entrepreneurs ayant réussi ?
 - (a) Oui
 - (b) Non

 9. De quelle information supplémentaire avez-vous besoin, concernant la gestion des stocks, qui soit susceptible de vous aider dans une marche plus efficace de votre entreprise ?

 10. Comment pensez-vous que cette nouvelle information sur la gestion des stocks vous aidera à améliorer votre entreprise ?

11. Si vous ne participiez pas à ce présent atelier, que seriez-vous en train de faire ?

11.a. Y-a-t-il quelqu'un d'autre qui fasse votre travail en ce moment ?

(a) Oui

(b) Non

11.b. Si oui, qui ?

.../....

Date

Module

Formateur

QUESTIONNAIRE DE SORTIE

Nom :

Adresse :

Activité :

J'aimerais vous demander de répondre à quelques brèves questions concernant l'information qui vous a été présentée dans cet atelier. Vos réponses aideront à projeter des exercices de suivi qui seront conçus dans le but de vous aider dans l'amélioration de la gestion de votre entreprise.

1. Qu'avez-vous le plus apprécié dans cet atelier ?

2. Cet atelier était-il conforme à vos aspirations ?

() a. Oui

() b. Non

Si oui, en quoi ?

Si non, pour quelles raisons ?

3. A votre avis quelles séances en particulier vous seront les plus utiles dans votre propre travail ?

a.

b.

c.

d.

.../....

Pour quelles raisons ?

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4. Quelles sources, selon vous, étaient les moins utiles ?

a.

b.

c.

d.

Pour quelles raisons ?

5. Avez-vous besoin d'informations supplémentaires concernant la gestion des stocks susceptibles de vous aider à devenir un meilleur entrepreneur ?

() a. Oui

() b. Non

Dans l'affirmative, quelle question en particulier ?

6. S'il vous était demandé de le faire, seriez-vous en mesure d'expliquer chacune des rubriques suivantes à un autre entrepreneur de Mellassine ? :

(a) Stock Oui
Non

(b) Gestion de stock Oui
Non

(c) Fiche de stock Oui
Non

(d) Stock de commande Oui
Non

(e) Rupture de stock Oui
Non

.../....

(f)	Demande	Oui
		Non
(g)	Stock minimum	Oui
	de sécurité	Non

7. Comme vous le savez, nous envisageons de vous rendre visite à votre entreprise, dans le courant du mois prochain. Et ce, afin de vous prêter assistance dans le cas où vous auriez une difficulté quelconque à mettre en pratique le contenu de cet atelier et de l'adapter aux besoins de vos propres affaires.

Quelle heure de la journée vous conviendrait-elle le mieux pour cette visite ?

() Matin : (spécifiez l'heure)

(.) Après-midi : (spécifiez l'heure)