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FINAL REPORT  
VOCATIONAL TRAINING ASSISTANCE PD  
JORDAN  
U.S.A.I.D. CONTRACT NUMBER  
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Submitted to  
THE VOCATIONAL TRAINING CORPORATION  
AND  
THE UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT

By  
The National Center for Research in Vocational Education  
The Ohio State University  
Columbus, Ohio 43210

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## INTRODUCTION

This final report of the Vocational Training Assistance--Jordan Project is submitted in accordance with the provisions of U.S.A. Contract No. NEB-0238-C-00-1001-00. Under this contract, financial assistance has been provided to the Vocational Training Commission of Jordan (V.T.C.) by the National Center for Research in Vocational Education, The Ohio State University. The original contract period extended from November 14, 1980 to December 13, 1981. A subsequent contract amendment extended the project by three months to March 13, 1982, for a total contract period of sixteen months.

Separate reports of activities and recommendations have been prepared for several efforts undertaken in this project, and this final report is complementary to those documents. The first report was prepared during the first few weeks of the project, and provided a detailed plan of project activities and timelines. Another report describes the activities and reactions to two staff training seminars that were conducted in Jordan. Four other reports summarize the activities and set forth recommendations relating to short-term advisor assignments in Jordan, in the areas of: skill standards development; guidance and counseling program development; follow-up program development; and tax levy system development. Three additional project activities have not been previously reported. These are: provision of technical information to the V.T.C.; development of a long-range sister school relationship; and U.S. training programs for V.T.C. staff. A fuller account of these three activities is provided in this report.

## PROJECT PLANNING AND COORDINATION

The contract provided for a comprehensive project planning activity in Jordan by the National Center's project coordinator, the director general of the Vocational Training Corporation and members of the staff, and representatives of U.S.A.I.D./Jordan. This activity occurred in Amman, Jordan from January 18 to February 5, 1981. Priority areas of activity were identified as a basis for the overall plan. V.T.C. staff contributed their suggestions for specific content and procedures to be incorporated within each of these activity areas. A plan document was drafted in three successive stages, with appropriate review and revision at each stage.

A detailed plan for two staff training seminars was also prepared as a part of the total project plan. The National Center's seminar planning consultant joined the planning team for two weeks to assist in the preparation of the seminars plan.

At the final review stage the total project plan was approved by the V.T.C. and U.S.A.I.D./Jordan leadership personnel. After returning to the United States, the project coordinator reviewed the project plan with National Center management, and with U.S.A.I.D. representatives in Washington, D.C. Copies of the plan were produced and distributed in accordance with contract provisions.

This project plan document provided a basis for close coordination of events throughout the project. Additional coordination was achieved through correspondence and telephone with U.S.A.I.D. and the V.T.C., as well as through the visits to Jordan of several short-term advisors, seminar leaders, and the visits of several Jordanian staff to the National Center for brief training programs. These personal visits provided opportunities for gaining additional needed information, and for the orientation of persons assigned to the project.

A further input to project planning and coordination occurred through a follow-up visit to Jordan by the project coordinator during November 1981. During this two-week visit, the project coordinator met with the director general and key members of the V.T.C. staff to review progress and accomplishments of the project; to identify more specific guidelines for the provision of technical information to the V.T.C.; to reflect upon project experience as a means of developing a long-range sister school relationship; and to seek approval of a three-month project extension that would allow for a more adequate delivery of materials to the V.T.C.

One of the very positive elements of this project has been the provision for adequate planning and coordination. Joint V.T.C.-National Center input to the preparation of a comprehensive project plan early in the contract period set the stage for all scheduled activities. Frequent interaction throughout the project, through correspondence and personal visits provided opportunities for reinforcing plans and making necessary corrections along the way.

## STAFF TRAINING SEMINARS

Two Jordanian staff seminars, one on the management of in-plant training, and the other on the modular system of training, were conducted in Jordan during this project. Since a separate report containing an account of the activities and summaries of the reactions of participants has been previously submitted, this report will contain only a brief summary of those activities.

The Management of In-Plant Training Seminar was conducted in Amman, Jordan from April 19-29, 1981. The seminar's purpose was to acquaint key personnel from the V.T.C., industry training departments, and Ministry of Education with selected industry training methodologies and techniques, and to suggest possible applications to the Jordanian setting. The central strategy was to bring to the seminar information from sources external to Jordan, and through presentation, discussion, and limited case study techniques, involve participants in a practical orientation to new training program practice. Fifteen persons participated in the two-week seminar.

The Modular System of Training Seminar was conducted in Amman, Jordan from May 3-13, 1981. Eighteen persons, most of whom are training officers in the V.T.C., attended this two-week seminar. The seminar program centered upon V.T.C.'s interest to more fully introduce the modular approach to its training programs. Seminar activities emphasized close reference to current V.T.C. training program curricula, and provided for participants to apply modular approach theory and principles to actual examples.

PARTICIPANT TRAINING PROGRAMS  
FOR V.T.C. STAFF

Participant training programs in the United States were provided to four V.T.C. staff members in accordance with the project plan. The four persons are directors-designate of new vocational training centers currently under construction and intended for V.T.C. apprentice programs. The overall intent of the training program was to provide a brief exposure to U.S. management, organization, and administration of vocational education.

The participants were selected by the V.T.C. and received their predeparture processing through the Office of Training, U.S.A.I.D./Jordan. Specific plans for the training program were developed by National Center project staff, reflecting the guidelines and timelines that were set forth in the project plan.

The training program was headquartered at the National Center. Participants were in the United States from July 11 to August 1, 1981. Training program topics included: orientation to vocational education in the United States, job analysis, determining instructional content, course construction, instructional methods, instructional resources, testing and evaluation, test construction, management of vocational education, supervision of staff, budgeting, personnel development, and educational leadership.

Instructional activities for the program included classroom presentations and discussions, individual study and assignments, and field trips to education and training organizations. During these visits the four participants toured facilities, observed programs in operation, and met with management and instructional personnel.

Cross-cultural orientation for the participants was provided through informal discussions with National Center staff at work and in their homes, visits to shopping centers, and recreational activities throughout Columbus and central Ohio.

## SHORT-TERM ADVISOR ASSIGNMENTS

Four short-term advisors were utilized in this project representing the areas of skill standards development, guidance and counseling program development, follow-up program development, and tax levy system development. Because separate reports detailing the activities and recommendations for each of these assignments have been submitted to the V.T.C. and U.S.A.I.D., this report will present only a brief summary statement.

The four areas represented by these short-term advisors are current priorities in V.T.C. training program development. The basic intent was to have each advisor devote two to three weeks in Jordan to analyze the situation relating to the particular area of assignment, and through observation and interaction with V.T.C. staff, prepare recommendations for strategies and procedures to further strengthen the V.T.C. program. Each advisor was given a brief period of preparation prior to the Jordan visit, and after the visit to prepare a report of findings and recommendations.

## PROVISION OF TECHNICAL INFORMATION

An expressed interest of the V.T.C. was to acquire technical information, and establish linkages with suppliers of information, as an aid to planning, policy-making, and management. Initially, this effort would be most beneficial to the central V.T.C. staff. Eventually, technical information needs will broaden as new vocational training centers are established, and information relating to the operational level will be required.

For two major reasons, the provision of technical information was scheduled to occur late in the project period. First, there was the experience of the project itself, through frequent interaction of V.T.C. and National Center personnel, that would provide clues to the kinds of information needed by V.T.C., and to sources and linkages that would be most helpful. Second, there was the more practical consideration of determining how much funding would be available for this purpose, after other project activities were completed.

Lower than anticipated travel and per diem costs for short-term advisors and for Jordanian participants did allow sufficient funding to justify a comprehensive search for appropriate materials. Therefore, the project coordinator, during his November 1981 visit to Jordan, met with V.T.C. staff to develop more specific guidelines. These guidelines appear in appendix A.

National Center project staff, aided informally by numerous persons within the Center and throughout the United States, identified appropriate materials in accordance with the established guidelines. Some of the materials are references for planners and managers of education and training programs. Others are curriculum packages that are representative of trade areas of most interest to current V.T.C. operations, and a few that correspond more to emerging areas of need in future V.T.C. programs. The interest of supplying the curriculum package samples does not imply their direct application to Jordan, but to serve as examples of complete packages that would offer ideas to Jordanian curriculum planners.

Some materials were also supplied in microfiche form, along with a microfiche reader. In addition to the fact that some materials are most readily available as microfiche, their low cost and ease of mailing to Jordan suggest that this will be a good way to supply materials to the V.T.C. indefinitely.

In retrospect, providing technical information to the V.T.C. would have been more organized if a specific amount of funding could have been stipulated for this purpose at the outset of the project. Priorities for materials could then have been established earlier, and acquisitions could have been made in relation to those priorities. While circumstances precluded such an approach in the present project, the three months extension to the project was extremely helpful in providing the time for an orderly search and acquisition of materials.

## SISTER SCHOOL RELATIONSHIP

The development of a long-range sister school relationship between the Vocational Training Corporation of Jordan and the National Center for Research in Vocational Education was identified as one of the project's activities. The rationale for this development is quite understandable. It is believed that several distinct similarities in the missions and desires of the V.T.C. and National Center would provide the basis for a growing professional relationship. Additionally, the current project, with numerous interactions between the staff of both organizations, would help to identify promising examples of future interaction, that could occur on a continuing basis.

The overall intent of the sister school relationship is to ensure the passage and exchange of professional ideas between the two organizations, and to foster linkages with other agencies that share common interests.

Two major practical considerations are influential in this relationship. The first has to do with presently different priorities of the V.T.C. and the National Center, and to recognize that particular relationships and activities would be affected by these differences. The second relates to available resources. It is recognized that very limited means exist within the regular funding of both organizations to carry out special activities relating to a sister school relationship. Most activities would therefore require some kind of special allocation within the budget of the two organizations, or from funding secured from appropriate third parties.

Guidelines for the sister school relationship were developed as a result of examining the various capacities and interests of the V.T.C. and the National Center, and identifying several potential strategies for joint effort. This process was aided significantly by the regular project activities, which yielded ideas for consideration. A more formal approach was taken in meetings in November 1981 by the National Center's project coordinator, the director general of V.T.C. and members of his staff, and representatives of U.S.A.I.D. From these sessions, lists of potential activities were developed under four general categories. This list is presented in the following statements. In each case a distinction has been made between those activities that could occur with little or no special resources, and those for which some special allocation of resources would be needed, either from internal sources, or generated externally by either or both organizations.

## Potential Sister School Relationship Activities

### Information Systems and Services

Both organizations depend upon the systematic search, acquisition, and dissemination of appropriate information to numerous user groups. This includes the preparation of special information transfer documents and papers in which existing knowledge is transmitted in new forms. In addition to an information exchange between the V.T.C. and National Center, there is a need to access information from a wide range of other sources in the two countries and the international community.

Several activities will be undertaken within the existing resources of the two organizations, including:

- Provide current National Center program and product information to the V.T.C. The director general of V.T.C. will be placed in a prime category of the Center's mailing list. This would provide Centergram, a monthly newsletter that describes Center projects and products, and key findings of studies conducted by the Center. Copies of the Center's publications lists, annual reports, and selected publications will be provided to the V.T.C.
- The V.T.C. will provide to the National Center appropriate documents relating to its program. Some of these items will be considered for inclusion in ERIC through the National Center's Clearinghouse on Adult, Career, and Vocational Education.
- Establish linkages with both organizations to existing data and information bases. The V.T.C. and National Center are in frequent contact with other agencies that relate to vocational education and training. Contracts by either organization will be referred to the other.
- Prepare and disseminate information analysis and synthesis documents that provide targeted information to specified user groups. This activity would require special funding if joint V.T.C. and National Center staff ventures are undertaken. Such documents could also be the result of special study and internship programs of V.T.C. and National Center staff.

- Through special funding, the National Center will respond to requests for computer information searches and purchase of desired documents for the V.T.C.

Developing, Adapting, and Installing  
Curriculum and Instructional Materials  
for Vocational Education and Training Programs

Curriculum and instructional materials are normally developed for particular settings and programs. Many of these materials are adaptable to other settings. Totally new materials can be developed as a result of research investigations. The V.T.C. and National Center recognize a need for: sharing existing materials, adapting materials to new settings, the development, through pilot and field test, of new materials, and for the further strengthening of their institutional capacities for instructional materials development.

It is recognized that language is an important factor and that most existing V.T.C. materials are in Arabic. U.S. materials would not require translation into Arabic before they are adapted for use in Jordan. Within these constraints, both organizations could share with each other examples of curriculum and instructional materials that are potentially adaptable to new settings.

Opportunities for cooperation exist in this area, but will in each case require special funding. These are:

- Identify potentially adaptable curriculum and instructional materials, for use in training either teachers or students, and develop joint efforts to revise and validate their use in new settings. An example might be the performance-based teacher and administrator training modules for the inservice training of V.T.C. instructional and management personnel.
- Conduct instructional materials development training programs at the National Center for V.T.C. staff. Such programs could combine theory with observations of ongoing National Center efforts, and be applied to the actual development of materials by the participants.
- Conduct regional and other international seminars on the subject of instructional materials development methodology and practice. This is viewed as a long-range possibility, and could be based upon the cooperative development experiences of V.T.C., the National Center, and other organizations in the international community.

## Leadership Training and Development

The national stature of both organizations implies a responsibility for the preparation of leadership personnel for their respective countries. Special training programs, internships, and study tours could train personnel for their present responsibilities, or for anticipated new ones. There is also potential for joining with other countries in this area.

Because of a need for travel, maintenance, and other special training program costs, this activity area would require special funding. Several types of leadership training activity do exist at the present time, as follows:

- Provide training programs for V.T.C. coordinators, directors, and principals. Such programs would be highly specific to anticipated leadership needs, and provide a combination of study, observation, and assignments and projects which apply the training to the V.T.C. setting. Consideration should be given to a follow-up in Jordan of such training programs to provide further on-site assistance and reinforcement of training through application.
- Conduct cross-cultural study tours for leadership personnel. The intent here would be to acquaint present leadership personnel with existing educational and training practice in other countries. Leadership could be provided by either V.T.C. or the National Center depending upon the particular settings to be observed.
- Provide cross-cultural internships for young staff members of both organizations.
- Conduct cross-cultural leadership training seminars for vocational education and training personnel.

## Joint Research and Studies

New knowledge generation is a responsibility of both organizations. Mutual interest exists regarding educational and training problems that justify research, as well as in the methodology that applies to planning and conducting research and studies. Within their existing constraints, the two organizations may join with other agencies in Jordan and the U.S., and agencies from other countries. The overall effect of this area is to strengthen institutional capacity for conducting research and studies; to conduct joint studies as

appropriate; and to share the results of joint investigations. It is recognized that the National Center would provide much of the leadership in this area, because of its long tradition in the area of vocational education research. The V.T.C. is presently a consumer of research, but recognizes a need to further develop its capacity for conducting research and studies within the Jordan setting.

Within their present capacities and resources, the following activities will be undertaken:

- The two organizations will share results of their research activities.
- Linkages will be established by the two organizations with other agencies that conduct research which relates to vocational education and training.

Additional collaborative opportunities for which special funding would be needed are:

- Develop special research papers and other publications that summarize research findings.
- Conduct research worker training programs for V.T.C. staff at the National Center. Participants could be associated with ongoing research projects of the Center, and engage in formal and nonformal programs to study research methodology at the Center, and within the university academic faculties.
- Conduct joint studies on problems of common interest to the V.T.C. and the National Center.
- Conduct comparative studies on topics that are of mutual interest to several countries.
- Conduct international seminars to identify researchable problems and to share research results.

There is an expectation that various strategies for coordinated effort between the V.T.C. and National Center will be more fully explored and tested as opportunities can be made available. The extent to which they occur is dependent upon the actions of both organizations, independently and together, to seek ways of continuing and expanding the sister school relationship, for their mutual benefit, as well as for other nations with similar interests.

## COMMODITY PROCUREMENT

Short-term assistance by a commodities procurement specialist was included in the project plan. This activity was to occur only if U.S.A.I.D. requested that this effort be undertaken through the Vocational Training Assistance--Jordan Project. It was later decided that U.S.A.I.D. would complete this assignment directly rather than under this contract. No effort was therefore undertaken in this connection.

## SUMMARY

This project found its genesis with a two-week planning mission where National Center staff and V.T.C. staff joined together to formulate and assimilate the needs the Jordanian staff felt important to strengthen their program. Consequently, the plan covered a wide range of topics within the relatively short time of sixteen months. Individual activities were likewise brief, carried out by seven American consultants who were in Jordan for two or three weeks, and by four V.T.C. staff who were in the United States for three weeks. Technical information materials to be supplied to the V.T.C. will not arrive in Jordan until after the completion of the contract period.

At most the project, by design, has provided V.T.C. staff with an exposure to a variety of external ideas. The extent to which these ideas lead to sustained impact can only be assessed after more time.

Indicators at this time are positive if not conclusive. The Vocational Training Corporation staff exhibits much competence and professional commitment in the development of vocational training programs. The activities carried out through this contract appeared to be timely and well-received. While the interactions were brief, hopefully they were appropriate. A most positive aspect of the entire project was the firm foundation established for future sister relationship.

The National Center for Research in Vocational Education has appreciated this opportunity for a brief formal association with the Vocational Training Corporation of Jordan. It sincerely acknowledges the cordiality and dedication that was demonstrated by the director general and members of the staff of the V.T.C. throughout the project. Appreciation is also extended to the representatives of U.S.A.I.D. in Jordan and Washington, D.C. for their close attention and support to the activities undertaken in this joint venture. The National Center joins with the V.T.C. in a commitment to a continued professional association in the years to come.

## Appendix A

### GUIDELINES FOR THE PROVISION OF TECHNICAL INFORMATION TO THE VOCATIONAL TRAINING CORPORATION

#### Guidelines for Selection of Materials

##### Philosophy and Strategies for Vocational Education and Training

- Philosophical bases for schooling--system-based as well as industry-based systems
- Most emphasis upon industry-based systems
- Information should relate to a variety of cultures and nationalities
- Relationship of philosophy to strategy is important

##### Program Planning and Development

- Planning administration and financing of vocational education
- Program planning objectives--relationship to action
- Planning for in-plant training
- Planning facilities
- Determining equipment specifications

##### Program Implementation

- Learning theory
- Learner behavior and characteristics
- Methodology of instruction
- Managing the instructional program--problem solving
- Guidance (recruitment and selection) and counselling (during program)

### Program Evaluation

- Program validation
- Follow-up systems and processes

### Instructional Materials

- Samples of student and instructor training modules and materials
- Samples should span an entire program and include reference materials and audio-visual aids
- Engineering trade emphasis--mechanical, electrical, and maintenance
- A few examples from agricultural and commercial areas

### Skill Standards--Certification

- Job classification
- Job analysis
- Job evaluation

### Audio-Visual Aids

- Production of audio-visual materials
- Training for use of audio-visual aids
- Planning, organizing, and managing production of audio-visual aids
- Facilities and equipment for audio-visual production--central depot
- Samples of audio-visual aids
- Catalogs from audio-visual suppliers

### Other

- Instructor training
- Comparative studies

- Samples of NOCTI tests
- Task inventories
- Economics--cost benefits of vocational education and training
- Supervisor and foreman training--relation to training function

#### Guidelines for Shipping Materials

- Materials will be boxed and shipped as acquired
- Materials will be sent by surface mail to:  
  
Director General  
Vocational Training Corporation  
P.O. Box 925837  
Amman, Jordan
- Packing slips with a listing of contents will be placed in each box and a separate copy sent by airmail
- Boxes will be numbered consecutively as shipped
- A cumulative list of materials will be prepared according to the categories. When all items have been shipped, copies of the cumulative list will be provided to the VTC, AID/Jordan, and AID/Washington.