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AD-A160 407

BASIC SKILLS RESOURCE CENTER:

**Information Components Needs
Assessment Report**

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for

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FOREWORD

The Instructional Technology Systems Technical Area, U.S. Army Research Institute (ARI), conducts research in support of Training. This research on an education information system was initiated in response to a request from the Office of the Deputy Chief of Staff of Personnel (ODCSPER) to disseminate knowledge and techniques to users on state-of-the-art educational research and practices.

As part of the task of developing and implementing an information center, a database of Army specific information was established. The needs assessment report shows how decisions were made about what information was required by Army personnel. Through the careful use of surveys and interviews the scope of the database was identified. This database of information on resources relevant to adult basic skills educational research and program development is being used to aid the Army's educational community in sharing information for program improvement.

EXECUTIVE SUMMARY

Basic Skills Resource Center Information Component Needs Assessment Report

InterAmerica Research Associates has been contracted by the U.S. Army Research Institute (ARI) to develop and operate the Basic Skills Resource Center (BSRC). The BSRC project has two interfacing components: the implementation and monitoring of basic research in the area of adult basic skills and continuing education; and the design, implementation, and operation of an information service. This report describes the conduct and results of a needs assessment undertaken to provide an empirical base for the design of the information component. In addition the report provides a set of recommendations for the design and operation of the information service, and identifies policy implications relevant to the BSRC information component.

The needs assessment was designed to acquire a pool of information that would assist project staff in the specification of an operational plan for the information component. Specifically, the following objectives were addressed:

- o to determine who would be the major users of the information service,
- o to assess the information needs of potential user groups,
- o to identify the scope of the database to be developed,
- o to identify the services that should be made available, and
- o to determine how information should be made available to users.

Data were collected between April and June 1982. Data collection activities included: distribution of a questionnaire targeted for ESOs and

ESSs; telephone and in-person interviews with Army educators/practitioners, researchers and policymakers, and site visits to two MACOMs, four installation education centers, and three military libraries/learning centers as well as reviews of Army regulations and documents.

The needs assessment findings revealed that the target groups for the information service would be practitioners, researchers, and policymakers within the Department of the Army. The greatest proportion of potential users was found to be the practitioner/educator group which includes ESOs, counselors, other education personnel at Army installations, and the Director of Education and education staff at the MACOMS.

No specific trends with regard to major subject areas to be addressed by the information system were found. Potential users identified a wide range of topics. These included: counseling information related to career planning and guidance and computer-based guidance systems; education information related to basic skills curricula, instructional materials and tests as well as computer-assisted instruction; management information related to contracting requirements, needs assessment techniques, program and curriculum evaluation techniques and research methods; and general military information regarding demographic data, and research and programmatic efforts in operation at other military installations.

Useful formats for this information cited by the potential user groups included abstracts of individual documents, bibliographies, curriculum and learning materials, literature searches, newsletters, referral services, research summaries of several documents and statistical data. Potential users provided little guidance in estimating the frequency of use of an

information service. Generally, it was reported that the information center would be used approximately once a month.

The preferred method of accessing the information center was found to be by computer, with telephone access considered an acceptable alternative method. All potential users indicated a need for prompt turnaround time for the receipt of information once a request was submitted. The most frequently accepted turnaround time period was stated to be three to four days.

Based on these findings several recommendations were noted regarding design considerations for the information center. First, the service should include a computerized information database and inquiry response system that actively reaches out to users and supplies them with information based on specific requests as well as anticipated requests. Second, the services to be offered by the information center should be targeted to educators/practitioners associated with Army education programs since this was the audience most likely to use the information services. Third, the focus of services and subject areas to be addressed by the information center should be limited to those areas identified by the primary target group. Fourth, the services offered by the information center should include a proactive component to encourage and stimulate user requests. Finally, telephone access would be the primary mode of accessing the information center, and an established schedule of expected response turnaround time should be established.

ACKNOWLEDGEMENTS

This report describes the needs assessment undertaken in the development of the Basic Skills Resource Center Information Center. It represents work performed between April and September 1982.

Art French, Judi Dover DeCarme, Rocco Russo, Charlene Rivera (all of InterAmerica Research Associates), and Brian Bush, and Beverly Bufford of ARI comprised the data collection team. Art French played a major role in the design of the needs assessment. Together with Judi Dover DeCarme he was responsible for writing the first draft of this report.

We wish to acknowledge all those who assisted us in the conduct of the study: the policymakers at TAGO; the researchers at ARI; the Education Program staff at TRADOC and FORSCOM; the ESOs who completed the Needs Assessment Questionnaire and who responded to the telephone survey interviews; and the ESOs and education staff members from Forts Dix, Bragg, and McPherson.

We also wish to thank Maria Crowley, Jane Itzel, Cindy Swiggard, and Donald Warrick for their clerical support in revising the many drafts of the report.

Charlene Rivera
Director of Information Services

TABLE OF CONTENTS

	<u>Page</u>
LIST OF EXHIBITS.....	vii
PREFACE.....	viii
INTRODUCTION.....	xi
Chapter 1 BACKGROUND.....	1.1
Preliminary Need's Assessment Activities.....	1.1
Identification of ARI Assumptions.....	1.1
Identification of Potential Users.....	1.2
Identification of Sources of Information.....	1.2
Needs Assessment Plan.....	1.3
Data Collection Procedures.....	1.4
Data Synthesis and Analysis.....	1.5
Chapter 2 SYNTHESIS OF NEEDS ASSESSMENT DATA.....	2.1
Data Sources.....	2.1
Education Center Survey	2.2
Installation Interviews.....	2.2
MACOM Interviews.....	2.4
TAGO Interviews	2.6
ARI Interviews	2.8
Review of Army Documents and Visits to Libraries and Information Centers	2.12

	<u>Page</u>
Findings.....	2.14
Currently Available Sources of Information.....	2.14
Potential user groups	2.15
Subject Areas to be Included in the Information Center	2.16
Desired Formats for Information Center Products...	2.16
Frequency of Use of Information Center	2.19
Preferred Methods of Accessing the Information Center	2.20
Turnaround Time.....	2.20
 Chapter 3 RECOMMENDATIONS FOR THE DESIGN OF THE INFORMATION CENTER.....	 3.1
Summary of Proposed Recommendations.....	3.1
Currently Available Sources of Information	3.1
Potential User Groups	3.2
Subject Areas to be Included in the Information Center	3.3
Frequency of Use of the Information Center	3.4
Preferred Methods for Accessing the Information Center	3.5
Turnaround Time	3.8
Conclusion.....	3.8
 Appendix A BSEP Needs Assessment Materials	 A.1
Appendix B Bibliography of Materials Examined	B.1

LIST OF EXHIBITS

<u>Number</u>		<u>Page</u>
1.1	Data Collection Process.....	1.4
1.2	Needs Assessment Data Sources.....	1.6
2.1	Education Center Survey Table of Results.....	2.1
2.2	Installation Needs Assessment Interviews Table of Results	2.5
2.3	MACOM Needs Assessment Interviews Table of Results	2.7
2.4	TAGO Needs Assessment Interviews Table of Results	2.9- 2.10
2.5	The Army Research Institute Needs Assessment Interviews Table of Results	2.11
2.6	Assessment of Information Needs Based on Army Documents and Visits to Libraries and Information Centers	2.13
2.7	Top Priority Information Needs	2.17
2.8	Additional Information Needs of Practitioners/ Educators	2.17
2.9	Additional Information Needs of Researchers and Policymakers	2.18

PREFACE

The Department of the Army is strongly committed to providing educational and training opportunities to its soldiers in order to ensure that they will possess the skills necessary to learn and perform their Army jobs. The primary delivery system for educational opportunities provided to soldiers is the Army Continuing Education System (ACES). The ACES program is an integrated system of voluntary career and self-developmental education opportunities. Overall, ACES has been designed to improve individual skills and knowledge through education. Thus, a range of educational opportunities are included in ACES. Examples include: the Basic Skills Education Program (BSEP), the High School Completion Program (HSCP), the Advanced Skills Education Program (ASEP), college preparatory courses, English as a Second Language (ESL), and others.

In an effort to expand and improve BSEP, the Army has awarded a contract to InterAmerica Research Associates, Inc. to develop and operate the Basic Skills Resource Center (BSRC). Funded through the Army Research Institute for the Behavioral and Social Sciences (ARI), contract number MDA 903-82-C-0169, the BSRC project has been conceptualized to assist the Army in meeting its research and information needs relative to basic skills education. The BSRC is composed of two interfacing components: a research component and an information component.

The research component has been designed to develop and implement a plan of related research activities relevant to basic skills education in the Army. A research plan has been developed by InterAmerica and ARI personnel that includes the conduct of five interrelated research studies which would contribute to research findings in the areas of basic skills education, learning strategies, and if feasible, application of educational technology to these research topics. Following the completion of these activities a research conference is to be held in order to share the research results, findings, and recommendations with selected members of the research community. It is also anticipated that the proceedings of this conference will be formally published and disseminated in order to enhance the use of these research contributions.

The second focus of the BSRC project includes an information component designed to develop and operate an Information Center whose purpose is to provide researchers, policymakers, and practitioners within the Department of the Army with information that is responsive to their training and research needs. Prior to the development and implementation of a design for the Information Center, several key questions had to be answered. For example: what types of services should be offered by the Information Center; what audiences should be served by the Information Center; what type of material should be included in the database; and others. In order to answer this pool of questions, project staff designed and conducted a needs assessment.

The purpose of this report is to describe in detail the needs assessment activities undertaken and successfully completed by project staff. This report is intended to present a synthesis of the data collected, to provide a set of recommendations for the design and operation of the Information Center, and to identify some policy implications relevant to the BSRC information component.

Rocco P. Russo
Project Director

INTRODUCTION

Policymakers in the Department of the Army (DA) have indicated that although a great deal of research literature exists in the area of basic skills education, access to this information is poor. As a consequence of this finding, ARI was given the responsibility of devising ways for providing better access to information pertinent to basic skills educational research and practice. In an effort to respond to this challenge, ARI has charged InterAmerica Research Associates with the responsibility of designing and implementing an Information Center which has the purpose of providing a "knowledge base for users involved in the delivery of services and research in basic skills."

A needs assessment was designed by InterAmerica staff to assist in the clarification of this mandate. ARI and InterAmerica staff concurred that the Information Center should respond to the real needs of its users. In other words, it was not assumed that basic skills should be the sole focus of the proposed Information Center. For this reason, it was decided that the needs assessment to be undertaken by InterAmerica should serve as one of the major indicators for defining the operational scope of the proposed Information Center. That is, the needs assessment should provide guidance in specifying who should be served by the Information Center, the content areas that should be included in the database, and how the information should be accessed.

Needs assessment activities described in this report were undertaken between April and July 1982. In general, the purpose of the needs assessment was to obtain information that could be used as an empirical base for the design of the Information Center.

Specifically, activities were intended to:

- o assess the information needs of potential user groups;
- o identify what information should be included in the center's database(s); and
- o determine how that information should be made available to users.

Potential users were identified and queried as to their existing information sources and needs. User needs were defined as a condition in which there is a discrepancy between an acceptable or desired state of affairs and an existing or current state of affairs. The extent of this discrepancy is an indicator of the intensity of the shortcomings of information resources identified by potential users and offers one condition for establishing content priorities to be addressed by the Information Center. Other conditions or factors to be considered when establishing priorities are: judged importance of expressed needs, the relevance of expressed needs, the number of persons identifying the same needs, or the feasibility of initiating a solution to eliminate the need.

Information resulting from the needs assessment activities, summarized in this report, is expected to and should be considered as only one factor leading to decisions concerning who is to be serviced and what

services are to be provided. It is thus recognized that factors such as resource availability, budget constraints, and conditions within the Army will be influential in finally determining the content areas, formats of information, and general services to be made available by the proposed Information Center.

Chapter 1

BACKGROUND

Preliminary Needs Assessment Activities

The basic intent of the needs assessment was to acquire a pool of information that would assist InterAmerica project staff to specify a design and operational plan for the Information Center. Thus, needs assessment activities were planned which would permit contact with a representative sample of individuals within DA who shared an interest in the Information Center.

Preliminary activities included the identification of:

- o the assumptions held by ARI personnel regarding the scope and services to be provided by an Information Center;
- o the potential users of the Information Center;
and
- o relevant Army education information resources.

The results of these planning activities are briefly delineated below. This discussion is followed by a description of the needs assessment plan.

Identification of ARI Assumptions. ARI staff assumptions regarding the scope and services to be provided by the Information Center were determined through formal and informal meetings and conversations.

These assumptions were that:

- o the Information Center would include one or more databases related to Army education;

- o materials would be identified, collected and made available to users of the Information Center;
- o the scope of the Information Center would be determined through user needs and budgetary constraints; and
- o the Information Center would be designed so as to facilitate its phaseover to a military non-research and development agency.

Identification of Potential Users. Potential users were identified by ARI staff. They included Education Service Officers (ESOs), Education Service Specialists (ESSs), education center counselors, Directors of Education, ARI researchers, and the staff at the Adjutant General's Office (TAGO). Other potential users of an Information Center were to be identified through the formal needs assessment.

Identification of Sources of Information. Sources of information relevant to the Army education mission were identified by ARI staff. They included:

- o the ARI Information Center;
- o the information service provided by ARI personnel; and
- o information and materials which address Army regulations, basic skills, needs assessment, and Army information needs.

In addition, InterAmerica Project Staff conducted database searches to determine what relevant basic skills education information currently exists and how easily the information would be accessible.

Information gathered from these preliminary activities provided a knowledge base from which a more formal needs assessment plan was defined.

Needs Assessment Plan

The needs assessment plan was designed to answer the following questions:

- o Who should the Information Center serve?
- o What services should be provided by the Information Center?
- o What products should be available through the Information Center?

The plan delineated the users to be surveyed, identified survey instruments and interview guidelines to be developed, and outlined procedures for data synthesis and analysis. Data collection activities were structured and completed between April and June, 1982. The following discussion provides the details as to how data were collected and synthesized, the type(s) of data collected, as well as the sources of data.

ARI and InterAmerica staff jointly identified the potential users to be contacted. It was determined that the needs assessment activities should include a survey of ESO's, in-person and/or telephone interviews with personnel at TAGO, ARI, and selected Army installations. Four Army bases, two Major Commands (MACOMs) and two installations, were ultimately selected for site visits. The four bases included Forts Dix, Bragg, Monroe (Training and Doctrine Command (TRADOC) headquarters), and McPherson (Forces Command (FORSCOM) headquarters).

Data Collection Procedures. Exhibit 1.1 provides a summary description of the data collection process. It provides an overview of when data collection took place, what user groups were surveyed, and what collection method(s) were utilized.

Exhibit 1.1

Data Collection Process

Data Collection Activity	Potential User Group(s)	Data Collection Method	Date Completed
ACES Conference	ESOs, ESSs n = 28	Written Questionnaire	April 15, 1982
Telephone Survey	ESOs, ESSs n = 38	Telephone Interview	June 6, 1982
TAGO	Policymakers n = 13	In-person Interviews	May 12 & 17, 1982
Fort Dix (TRADOC)	Installation level education staff n = 5	In-person Interviews	June 14, 1982
Fort Bragg (FORSCOM)	Installation level education staff n=1	Telephone Interview	June 23, 1982
Fort Monroe (TRADOC Headquarters)	MACOM-level education staff n = 2	In-person Interviews	June 14, 1982
Fort McPherson (FORSCOM Headquarters)	MACOM-level education staff n = 5	In-person Interviews	June 15, 1982
ARI	Researchers n = 7	In-person Interviews	June 18 & 25, 1982
Library and learning centers	Education staff n = 3	In-person site visits and document review	June 14, 1982

The first data collection effort required the development of an Information Resource Center Questionnaire (see Appendix A) to be utilized with Army education personnel who attended the ACES Conference in Colorado Springs in April, 1980. This same questionnaire was used by ARI staff to conduct a worldwide telephone survey of ESOs in eight different Major Commands. The intent of the telephone survey was to supplement and validate the data collected during the ACES conference.

Interview guidelines (see Appendix A) for data collection among a wide range of potential users were also developed. The purpose of these guidelines was to provide InterAmerica staff with a standard interview format which would provide consistency to the type of data solicited and provide a structure for subsequent synthesis of the information. In addition, an information packet was developed for use during the in-person interviews. The purpose of the packet was to provide researchers and educators with examples of services that could be offered by an information center.

Data Synthesis and Analysis. Data synthesis and analysis activities were planned and conducted in three stages. Stage one involved the compilation of individual interview summaries. Stage two involved the aggregation of interview and questionnaire data. Stage three involved a final data aggregation which produced a synthesis of information relevant to the design and operation of an information center.

In the first stage, individual summaries were developed for each interview conducted. This provided each interviewer with the opportunity to complete any information gaps in their individual reports.

The second stage of data synthesis involved an aggregation of information collected from similar data sources. This was done in order to produce an information needs profile for each potential user group. For example, all TAGO data were aggregated to produce an information needs profile for policymakers; ARI data were aggregated to produce an information needs profile for researchers, etc. Exhibit 1.2 provides a summary of the data sources which were combined to produce the aggregated needs assessment summaries.

Exhibit 1.2

Needs Assessment Data Sources

<u>Data Sources</u>	<u>Potential User Group</u>
TAGO interviews	Policymakers
ARI interviews	Researchers
MACOM-level interviews	Education Program Staff
ESD questionnaire and telephone survey	Education Staff and Practitioners
Installation-level interviews	Education Staff and Practitioners
Army regulation 621-5, documents, library interviews and learning center interviews	Policymakers, Researchers and Practitioners

Stage three of the data synthesis and analysis activities consisted of the aggregation of information described in the individual user reports. The analysis provided a means of identifying issues and recommendations for the following items related to the Information Center.

- o usability of currently available sources of information;
- o potential user groups;
- o subject areas to be included in a database;
- o desired format of products to be produced;
- o potential frequency of use;
- o preferred methods of accessing the Information Center; and
- o acceptable turnaround time for information requests.

The following section of this report provides a discussion of each of these items based on summaries of the needs assessment data and their outcomes.

Chapter 2

SYNTHESIS OF NEEDS ASSESSMENT DATA

Provided in this section are a set of summaries based on the results of data collected from:

- o Education center personnel via a written questionnaire administered at the ACES Conference in Colorado Springs and a telephone survey of ten MACOMs throughout the world;
- o Education Center Staff at the Installation-level;
- o Education Center staff and policymakers at the MACOM level;
- o Policymakers at the Adjutant General's Office;
- o Researchers at ARI; and
- o An assessment of needs based on the review of materials and sources of information relevant to the development of an information center.

Each summary provides a brief description of the outcomes resulting from each data collection effort. Based on these summaries, relevant findings are identified pertinent to key issues related to the development of the Information Center.

Data Sources

Synthesis an analysis of the needs assessment data provided summaries or profiles of potential user groups as well as a profile of information resources currently available to these user groups. These profiles are identified and discussed below.

Education Center Survey. A survey of Education Center personnel was undertaken in two separate data collection efforts in order to assess the needs of Army education personnel and to obtain information which would assist in the design of an information resource center. One effort undertaken with Army Education Center personnel including ESOs, ESSs, counselors, instructors, and other Army education staff involved the distribution of a questionnaire at the April 15, 1982 ACES conference in Colorado Springs. A total of 28 completed surveys were collected. In addition, a followup survey was undertaken via telephone by ARI staff in order to supplement and validate the data collected at the ACES conference.

Respondents to these survey efforts were predominantly ESOs (greater than 64%). However, some responses were obtained from Education Service Specialists (ESSs), counselors, instructors, and other education staff. Installations surveys included responses from FORSCOM (23%), DARCOM (17%), TRADOC (27%), USAREUR (21%), and other MACOMs (12%). Responses to the questions varied greatly among the respondents, both within and between MACOMs. Approximately 40% of the respondents reported that an information resource center would be extremely useful in improving their educational programs. Thirty-four percent reported that an information center would be moderately useful and 26% indicated that it would only be slightly useful or not useful at all. The combined results of the questionnaire and telephone surveys are summarized in Exhibit 2.1.

Installation Interviews. ESOs and other education staff members at Fort Dix (TRADOC) and Fort Bragg (FORSCOM) were interviewed in June

EXHIBIT 2.1

EDUCATION CENTER SURVEY

TABLE OF RESULTS

SUBJECTS AND FORMATS OF INFORMATION NEEDED		SOURCES OF INFORMATION CURRENTLY AVAILABLE	ACCEPTABLE TURNAROUND TIME	FREQUENCY OF USE	METHODS OF ACCESSING THE INFORMATION CENTER
SUBJECTS	KINDS OF INFORMATION				
Needs assessment techniques	Learning materials (e.g., workshops, film strips)	Current research summaries	One week or less in most cases	Approximately once a month	Toll-free telephone
Contracting requirements	Instructional design (e.g., development of materials)	Curricula			
Reading skills	Computer managed instruction	Bibliography of materials			
Writing skills	Current research (e.g., findings, implications)	Newsletter			
Computation skills	Curriculum materials (lesson plans)	Literature searches Referral service			
Listening skills	Instructional techniques (e.g., teaching methods)	Abstracts			
Program evaluation techniques	Other (e.g., learning strategies, human resources)	Toll-free telephone number			
ESL					
Life coping					
Quality assurance					
Psychomotor skills					

1982. The purposes of the on-site interviews were to validate information collected through the questionnaire and telephone survey, and to explore in greater depth some of the issues influencing the design of an information center. The Fort Dix interviews were conducted on-site, while the Fort Bragg interview was completed by telephone. These installations were chosen because they serve a very large number of soldiers and offer extensive educational programs.

The initial response of ESOs and staff members to the idea of an information center was that they perceived no need for an information center, especially since their options for developing and implementing education programs are constrained by contracting procedures. However, as the idea was further explored through the interview, the respondents began to identify areas where they did, in fact, have information needs. In principal there was agreement that an information center could be useful to them.

The ESOs indicated that they would make use of an information center if it was truly responsive to their needs. Other potential user groups they identified were counselors, other Army education personnel, and contractors that are developing education programs for the installations. Specific details of the results of the installation needs assessment interviews are summarized in Exhibit 2.2.

MACOM Interviews. Interviews were conducted with personnel at two Army MACOMs -- TRADOC and FORSCOM on June 14, 1982. Nine Army and

EXHIBIT 2.2

INSTALLATION NEEDS ASSESSMENT INTERVIEWS

TABLE OF RESULTS

SUBJECTS AND FORMATS OF INFORMATION NEEDED		METHODS OF ACCESSING THE INFORMATION CENTER	FREQUENCY OF USE	ACCEPTABLE TURNAROUND TIME	SOURCES OF INFORMATION CURRENTLY AVAILABLE
SUBJECTS	FORMATS				
Computer system evaluation	Audio-visual equipment evaluations	Abstracts	Too many variables involved to be able to anticipate at this time	Same day (ideal)	Army Headquarters (via telephone)
Compatibility of various computer systems	Audio-visual courseware evaluation	Synopses		Three to four working days	Army service schools (via telephone)
Software evaluations	Exemplary programs that focus on Army needs	Research syntheses		Eight to ten working days	TRADOC Headquarters (via telephone)
Equipment evaluations	Curriculum evaluations	Referral service			DANTES (via telephone)
	Sources of Education programs for self-paced instruction	Newsletter (to be disseminated among installations)			Area colleges and universities
	Computer systems for use by guidance counselors				Installation libraries
	Information exchange between HQDA and the installations				PLATO computer system
					State and Federal government agencies

civilian staff were interviewed including the Director of Education for each of the MACOMs visited, ESOs, counselors, and other education center staff. The purposes of the interviews were to assess the needs of MACOM-level staff, to identify what information should be included in an information center, and to clarify how that information should be made available to users. Responses to issues varied between installation-level and MACOM-level staff but were consistent within a command level.

The usefulness of, and need for, an information center was reported to be somewhat limited. The Directors of Education indicated that their managerial and policy decisions were generally guided by DA policy and regulations. Thus they indicated little or no need for an information center. Education Service Specialists, counselors, and other education center staff reported a greater need for the services of an information center but indicated very different, specific, and often conflicting needs. Specific details of the results of the MACOM needs assessment interviews are summarized in Exhibit 2.3.

TAGO Interviews. Thirteen members of The Adjutant General's Office (TAGO) were interviewed between May 12 and May 17, 1982, concerning their information needs. Perceptions of the need for an information center varied widely among the interviewees. Several staff members indicated that they saw no need for an information center. Analysis of the data from the discussions did not reveal a predominant theme for the scope or services that the Information Center should provide. A consensus that resulted from these meetings, however, was the inadvisability of limiting the scope of the Information Center to

EXHIBIT 2.3

MACOM NEEDS ASSESSMENT INTERVIEWS

TABLE OF RESULTS

SUBJECTS AND FORMATS OF INFORMATION NEEDED		SOURCES OF INFORMATION CURRENTLY AVAILABLE	ACCEPTABLE TURNAROUND TIME	FREQUENCY OF USE	METHODS OF ACCESSING THE INFORMATION CENTER
SUBJECTS	FORMATS				
<p>Career Planning</p> <p>Needs assessment</p> <p>valuation Techniques</p> <p>BSEP curriculum, military occupational specialty and skill area curriculum</p>	<p>Directives and regulatory information specific to the MACOM</p> <p>Demographic information concerning trends in basic skills</p> <p>Computer assisted instruction packages</p> <p>Statistical data on current tuition</p> <p>Statistical data on race, educational level, etc., of incoming soldiers</p> <p>Technical manuals</p>	<p>Databases: ERIC DIALOG OCLC BSI THE SOURCE MICROMET</p> <p>Military base reference library</p> <p>PLATO computer-based system</p>	<p>A few days</p>	<p>Infrequent, if any anticipated use (Directors of Education)</p>	<p>Computer or telephone access</p>

basic skills education. To be useful, respondents suggested that the Information Center provide current information on a broad range of topics.

Groups of potential users, in addition to the TAGO staff, were reported to include researchers, policymakers, practitioners, MACOMs, ESOs, and counselors at installations. In discussing the potential users, the issue of the military chain of command was raised. Some interviewees felt that having ESOs directly contact the Information Center would not meet with the approval of installation commanders or the Directors of Education at the MACOMs, thus posing a potential problem in operating the Information Center. Results of the TAGO needs assessment interviews are summarized in Exhibit 2.4.

ARI Interviews. Interviews were conducted with seven ARI personnel during June 1982. The purposes of the interviews were to assess the needs of ARI researchers, to identify what information should be included in an information center, and to discuss how that information should be made available to users. Respondents included evaluation and curriculum design specialists associated with Army Basic Skills Education Programs.

Several respondents reported limited enthusiasm about their use of an information center. They indicated that its usefulness would depend greatly upon the type of information provided, its accessibility, and its responsiveness to the specific needs of individual users. Results of the interviews are summarized in Exhibit 2.5.

EXHIBIT 2.4
TAGO NEEDS ASSESSMENT INTERVIEWS
TABLE OF RESULTS

SUBJECTS AND FORMATS OF INFORMATION NEEDED		SOURCES OF INFORMATION CURRENTLY AVAILABLE	ACCEPTABLE TURNAROUND TIME	FREQUENCY OF USE	METHODS OF ACCESSING THE INFORMATION CENTER
SUBJECTS	KINDS OF INFORMATION				
Adult Education:	Basic and advanced skills education Educational achievement levels Educational needs assessment Research methods Evaluation of educational programs and curricula Quality assurance of education State-of-the-art in teaching methods Psychology of learning	Copies of entire documents, curricula, etc. Curricula, syllabi Literature abstracts Notices of conferences, workshops, meetings, etc. Referral service Statistical information Summaries of research projects Syntheses of documents	The Army Library at the Pentagon The Army Research Institute Library National Institute of Education Library Human Resources Research Organization Library ERIC, OPTIMIS National Center for Education Statistics Defense Language Institute Training Development Institute Office of Retention and Recruitment State Education Agencies MACOMs and Installations TAGO files	Daily Weekly Monthly Sporadically Infrequently Annually	Telephone Computerized access Telephone number in Europe for overseas personnel to use Teleconferences to exchange ideas Electronic mail system
Counseling and Guidance:	Career and vocational guidance Tests and measurement (achievement, diagnostic, interest) Career maturity Cross-cultural counseling Civilian labor market information				

EXHIBIT 2.4 (cont...)
TAGO NEEDS ASSESSMENT INTERVIEWS
TABLE OF RESULTS

SUBJECTS AND FORMATS OF INFORMATION NEEDED		SOURCES OF INFORMATION CURRENTLY AVAILABLE	ACCEPTABLE TURNAROUND TIME	FREQUENCY OF USE	METHODS OF ACCESSING THE INFORMATION CENTER
SUBJECTS	KINDS OF INFORMATION				
Military information (cont.)	Model contracts for ESOs to use for guidance in procuring education programs				
State Departments of Education	Policies Education requirements Legal issues				

EXHIBIT 2.5

THE ARMY RESEARCH INSTITUTE NEEDS ASSESSMENT INTERVIEWS
TABLE OF RESULTS

SUBJECTS AND FORMATS OF INFORMATION NEEDED		ACCEPTABLE TURNAROUND TIME	FREQUENCY OF USE	METHODS OF ACCESSING THE INFORMATION CENTER
SUBJECTS	KINDS OF INFORMATION			
<p>On-going research in other military service branches</p> <p>Related research, including the latest professional journals, publications, and technical reports</p> <p>Civilian and Army on-going research (content and techniques)</p> <p>Cognitive educational research</p> <p>Functional basic skills, including job related training, occupational planning, functional literacy, and evaluation techniques</p>	<p>Demographic data</p> <p>Access to existing tests, materials and curriculum in basic skills</p>	<p>Less than one week</p>	<p>Sporadically</p> <p>Monthly</p> <p>Often</p> <p>Depends</p>	<p>Computer access</p> <p>Telephone contact</p>
	<p>FORMATS</p> <p>Abstracts of current research</p> <p>Bibliography including title, author, point of contact and price</p> <p>Materials for information and research purposes</p> <p>Materials for training purposes</p> <p>Literature searches</p> <p>Newsletter</p> <p>Curricula</p> <p>Referral service</p>	<p>SOURCES OF INFORMATION CURRENTLY AVAILABLE</p> <p>Literature searches by the Army Research Institute (ARI)</p> <p>technical information center or library reference service</p> <p>Informal information channels such as ARI colleagues, or local professional contacts</p> <p>ERIC, DIALOG, NTIS and DTIC databases</p>		

Review of Army Documents and Visits to Libraries and Information

Centers. In addition to interviews, telephone surveys, and questionnaires, the needs assessment involved:

- o analysis of various Army documents related to ACES activities; and
- o visits to libraries and information centers.

The purposes of these activities were to acquire a broad conceptualization of the Army's educational programs and to assess existing information resources and services that an information center should not duplicate. This activity, summarized in Exhibit 2.6, took place in June 1982 and involved a review of materials (see Appendix B for a bibliography of materials examined) and visits to the Army Research Institute Technical Information Center, the DARCOM Learning Resource Center, and the Fort Dix MOS Library.

EXHIBIT 2.6

ASSESSMENT OF INFORMATION NEEDS BASED ON ARMY DOCUMENTS
AND VISITS TO LIBRARIES AND INFORMATION CENTERS
TABLE OF RESULTS

SUBJECTS AND FORMATS OF INFORMATION NEEDED		SOURCES OF INFORMATION CURRENTLY AVAILABLE	ACCEPTABLE TURNAROUND TIME	FREQUENCY OF USE	METHODS OF ACCESSING THE INFORMATION CENTER
SUBJECTS	KINDS OF INFORMATION				
<p>Research in education</p> <p>Research in basic skills education</p> <p>Available audio-visual hardware and software and educational materials</p> <p>Testing</p> <p>Civilian cost of living</p>	<p>Counseling methods</p> <p>Evaluation techniques</p> <p>Marketing techniques</p> <p>Economic analysis, cost-benefit analysis, cost effectiveness analysis</p> <p>Word frequency and criticality analysis</p> <p>Civilian employment information</p> <p>Information on colleges, vocational schools, and other educational institutions</p>	<p>Selective dissemination of information that matches a user's interest profile</p> <p>Publishing lists of new materials, research findings, etc.</p>		<p>Current uses are:</p> <p>20 requests for computerized literature searches per month</p> <p>200 interlibrary loan requests each month</p>	<p>Personal visit</p> <p>Telephone</p> <p>Interlibrary loans for installation personnel of hard copy materials</p>

Findings

In the following section, the results from the various needs assessment data collection effort are aggregated. The findings are grouped according to the issues most relevant to the design of the Information Center.

Currently Available Sources of Information. Interview respondents, as a group, appeared to be quite resourceful in their information gathering techniques. The respondents stated that they often used information sources outside the traditional realm of libraries and the journal literature of their field.

Library resources cited as satisfying some of their information needs included the the Army Library, installation libraries, the ARI Technical Information Center, the National Institute of Education Library, and the Human Resources Research Organization Library. Many organizations and government agencies were also mentioned as being useful sources of information. These included the National Center for Education Statistics, the Defense Language Institute, the Office of Retention and Recruitment, the State education agencies, and the contractors who provide education programs to installation personnel. Some respondents also identified computerized databases which they had found helpful in their work. The primary databases identified were: ERIC, NTIS, DTIC, MILPERCEN, OPTIMIS, and MIS (an internal technical report file at ARI). However, it was found that some ESOs were not aware of the potential of computerized literature searches which are, or should be, available to them.

In addition to these formal sources outside the Army chain of command, it was reported that there is, of course, a flow of information within the Army. The ESOs indicated that they often turn to other installations, the MACOMs, the Army service schools, and the HQDA when seeking information. In turn, the researchers and policymakers at ARI and TAGO indicated that they contact personnel at the MACOM and installation levels to gather background data that they may need. Finally, the installation respondents indicated that their information needs are often met by informal networks of ESOs and counselors who regularly communicate with each other.

Potential User Groups. Practitioners, researchers, and policymakers were identified as the potential target audiences who would use the Information Center. Interview and questionnaire data indicated that the largest proportion of potential users and the group most likely to use the Information Center's services would be the practitioners or educators. This group's currently available information sources are less developed than those of other groups, and thus would have the greatest need for the services that the Information Center could provide. This group includes ESOs, counselors, other education personnel at the installations, the Director of Education, and education staff at the MACOMs.

The second most likely group to use the Information Center is the research group. Although researchers, located at ARI have a plethora of information resources available to them, it was reported that an information center with unique services in the area of Army education would be useful to them.

Policymakers in The Adjutant General's Office, are another potential user group. Although their information needs are generally supplied through Army communication channels, they did report an occasional need for background information or supporting evidence which could be supplied by an up-to-date information center data bank.

Subject Areas to be Included in the Information Center. The breadth of topics identified as information needs included a variety of subject areas beyond basic skills education. It was reported by many respondents that limiting the Information Center's scope to basic skills would drastically reduce its usefulness to the target population.

The subject areas identified in the needs assessment activities are described in Exhibits 2.7 through 2.9. Exhibit 2.7 lists top priority information needs. The list includes those topics which were identified by two or more of the user groups. Exhibit 2.8 provides a list of subject areas identified by the practitioners/educators group. Exhibit 2.9 catalogs subject areas cited in interviews with researchers and policymakers as well as subject areas identified from document analysis and library information center visits.

Desired Formats for Information Center Products. Determining the subject areas to be included in the Information Center provides a very useful starting point for designing services. However, it does not answer the question of how the information acquired by the Center should be repackaged to most appropriately meet the needs of users.

EXHIBIT 2.7
TOP PRIORITY INFORMATION NEEDS

SUBJECT AREAS	
COUNSELING	Career planning and guidance Computer-based guidance systems
EDUCATION	Basic skills curricula, instructional materials, and tests Computer-assisted instruction
MANAGEMENT	Contracting requirements Needs assessment techniques Program and curriculum evaluation techniques Research methods
MILITARY INFORMATION	Demographic data Research and programs at other installations and in other branches of the military

EXHIBIT 2.8
ADDITIONAL INFORMATION NEEDS OF PRACTITIONERS/EDUCATORS

SUBJECT AREAS	
COMPUTER SYSTEMS	Computer equipment evaluations Computer system compatibility Computer system evaluations Software evaluations
EDUCATION	Audiovisual courseware evaluations Audiovisual equipment evaluations Curriculum evaluations Instructional design Self-paced instructional programs Specific skills: Computation ESL Listening Reading Writing Tuition rates
MILITARY INFORMATION	Directives and regulatory information

EXHIBIT 2.9

ADDITIONAL INFORMATION NEEDS OF RESEARCHERS AND POLICYMAKERS

SUBJECT AREAS	
COUNSELING	Career Maturity Civilian labor market data Cross-cultural counseling Information on colleges, vocational schools, and other educational institutions
EDUCATION	Basic skills education Functional basic skills Education research Educational achievement levels Information on colleges, vocational schools, and other educational institutions Literacy standards Psychology of learning Quality assurance Teaching methods Tests and measurement
GOVERNMENT INFORMATION	Federal budget appropriations State Education Agencies: policies, education requirements, legal issues
MANAGEMENT	Economic analysis, cost-benefit analysis, cost-effectiveness analysis General management skills Marketing educational programs

Therefore, needs assessment questions included probes about the types of information formats that would be most useful to the potential users. The list below includes the formats that were named by two or more groups:

- o abstracts of individual documents;
- o bibliographies;
- o curriculum materials;
- o learning materials;
- o literature searches;
- o newsletters;
- o referral service;
- o research summaries of several documents; and
- o statistical data.

Formats cited by only one group and which are not listed above included: hard copies of entire documents, notices of conferences and workshops, and teleconferences. None of these formats were suggested by the primary user group (the educators/practitioners).

Frequency of Use of the Information Center. The potential use of the Information Center depends on many factors. These include: particular needs of potential users, an awareness that the Information Center exists and can provide useful services, comprehensiveness and currency of the available materials, the confidence users have in the Information Center's capabilities and thoroughness, ease of access, turnaround time, first impressions and experiences dealing with the Information Center, and even the individual's own motivation. Because

of these factors, individuals' estimations of their use of the Information Center varied greatly.

The most often reported frequency of use was approximately once a month. However, individuals also reported that they would use the Information Center "frequently", "often", "sporadically", "rarely", and "hardly ever." These responses do not provide guidance in projecting the volume of use of the Information Center; they simply indicate the difficulty in estimating its frequency of use.

Preferred Methods of Accessing the Information Center. Methods of access offered as possible options in the needs assessment interviews and survey questionnaires were computer, mail, and telephone. By far the preferred choice was computer access, with telephone access considered an acceptable alternative method.

Turnaround Time. Most of the individuals interviewed reported a need for prompt turnaround time. Turnaround time is defined as the period of time from submitting a request to the user receiving the information. Acceptable reported turnaround times ranged from one day to one month, with the most frequently reported time period being three to four days. Users generally reported that three to four days was appropriate for an average request; for quick reference information such as a name or address, a shorter turnaround should be expected; and for requests which require a database search, research synthesis, or other detailed information a longer turnaround time would be acceptable.

Chapter 3

RECOMMENDATIONS FOR THE DESIGN OF THE INFORMATION CENTER

The results of the needs assessment provide some understanding of how the proposed Information Center should operate. In the following section, options drawn from the existing data are presented for consideration in the design of the Information Center.

Summary of Proposed Recommendations

Each of the key issues previously identified and discussed are further considered in terms of potential options for the Information Center. These options should provide guidance in the development or specification of the design plan for the Information Center.

Currently Available Sources of Information. The needs assessment data indicated that although potential users feel that they are resourceful in the gathering of immediately needed information, they may not be aware of other sources of information that are available and therefore do not utilize them. A majority of respondents indicated that they rarely seek out information on particular topics, but that they feel a need to be kept abreast of general activities in their field.

Based on this understanding, two options are possible in designing the Information Center. They are:

- o to design a mechanism for actively reaching out to users and supplying them with information even before they have actually asked for it; and

- o to operate an inquiry response system that disseminates information only after specific requests have been received.

It is recommended that both options be incorporated into the design with emphasis directed toward the first option. Although outreach services utilize more resources than other less aggressive approaches to information dissemination, it is clear from the needs assessment data that an inquiry response system alone will not satisfactorily meet user needs.

Potential User Groups. The potential user groups identified by the needs assessment include policymakers, researchers, educators/practitioners and contractors. Data from the needs assessment indicated that the user group most likely to utilize the services of the Information Center is the educators/practitioners group.

The options available in the design of the Information Center are:

- o to provide services for all groups without establishing priorities; and
- o to select the group most likely to use the Information Center and tailor services to their needs.

Since the educators/practitioners at both the installation and MACOM level were identified as the audience most likely to use the Information Center, the second option is recommended. It is proposed that the information services be directed toward the needs of the ESOs, counselors, instructors and the Education Center staff at the

installations and MACOMs. Many of the services and resources developed for the educators would of course, also be valuable to researchers at ARI and the policymakers at the MACOMs and at TAGO. Thus, it is suggested that these groups also be served insofar as their information needs fall within the parameters of the information services to be provided to the target audience.

Subject Areas to be Included in the Information Center. The breadth of potential topics identified to be included in the Information Center database were extensive and went far beyond the area of basic skills education. Based on this trend at least two options are potentially possible with regard to the selection of subject areas for the Information Center. They are:

- o to include subject areas identified by all possible user groups; and
- o to focus services and subject areas to those identified by the target group which would be most likely to use the Information Center services and products.

The advantage of option one is that the Information Center would be equally useful to researchers, practitioners/educators, and policymakers. The disadvantage of this option is that the Information Center would be limited in its depth of coverage of any particular topic since resources would be necessarily expended on including a wider range of subject areas. Therefore, attempts to cover a broader subject area may not be entirely successful and may result in user dissatisfaction and eventual lack of use of the Center.

Option two is seen to provide a specific purpose and focus to the scope of the Information Center. Thus, the information needs of a single user group would be met with current and in-depth information in those areas identified as important to that user group. The disadvantage in selecting this option is that only a limited group of individuals would find the Information Center useful to their needs.

Although both options are feasible, it is InterAmerica's recommendation that option two be selected because it would provide firmer boundaries within which to operate the Information Center.

Frequency of Use of the Information Center. It was reported, and should be considered seriously, that individuals will probably not go out of their way to make use of an information center if it is easier to ask a colleague in the next office. Nor will they use an information center a second time if it fails to meet their specific needs. For this reason any attempt to estimate the frequency of use of the Information Center would have to be considered purely speculative.

Based on this understanding, InterAmerica recommends that the services to be provided by the Information Center be actively advertised to the target user groups in order to encourage and stimulate user requests. Also, it is recommended that access to the Information Center be made as compatible with user needs as possible since ease of access will most likely influence the repeated use of the Information Center.

Preferred Methods for Accessing the Information Center. The methods identified for accessing the Information Center were computer and telephone, respectively. Since each method of access is a viable option, the pros and cons of each are briefly discussed below.

The searching of online databases from remote terminals has become a well established procedure for the acquisition of information. Over 1,200 databases, one-third of them bibliographic, are publicly available to anyone who has a teletype compatible or "dumb" terminal. Any micro or word processor can be adapted for remote database searching at minimal cost. Within the DA most installations have at least one such terminal which could be utilized for access to the Information Center.

Direct dial-up via telephone lines requires little or no advanced preparation, assuming the computer has a telecommunications software package and modem installed. The person seeking to search the database need merely be given the computer's telephone number and a password identification. It is usually more cost-effective to provide access through a VAN (value added network) such as Tymnet, Telenet or Uninet. By dialing a local modem, the long distance access cost is reduced to \$5-7 per hour. The Army may have provision for use of its telecommunications network at even lower cost.

The advantages of computerized access to an Information Center are: that response time is minimal; and that the user can directly interact with the computer enabling immediate review and evaluation of citations.

The disadvantage of providing computerized access to all members of the target audience is that this service would require an immense coordination and training effort on the part of the InterAmerica staff. The general user would need to be trained in order to understand how to perform a search and to efficiently utilize online time. Training, in turn, has budgetary and personnel implications for the Information Center staff.

The advantage of the second option is that every user would generally have access to a telephone, thus providing them with immediate access to the Center. Telephone access would also provide the Information Center's staff a more exact means of gathering statistical data on the types and number of requests that are being made. These data are extremely valuable in the formative years of the Information Center when the database is in the early stages of development.

Another advantage of telephone access is that personalized assistance can be provided through the Center's information specialist. When necessary, the information specialist can evaluate the results of a computer search and augment it with other relevant citations and/or materials, thereby providing more responsive information to the user. The technical input that could be provided by the information specialist would not be available if the user were to directly access the information via computer linkage.

A disadvantage of only providing telephone access to the Information Center is that users need to be skilled in accurately communicating

their needs to the information specialist. Users then have to rely on the interpretation of the information specialist to evaluate what citations are or are not relevant. Also, the actual printout of the citations selected by the information specialist may not reach the user for several days which delays evaluation of their information.

Based on these facts, while it is an attractive option to provide direct user access on a general basis, InterAmerica has three recommendations. First, that users be allowed to access the Information Center in the first year of operation on a pilot basis through four or five existing installation libraries where equipment is centralized and where personnel are already trained in the general principles of database searching techniques. Second, that a select group of ESOs at representative sites be provided direct computer access to the Information Center in conjunction with training in computer searching techniques. Although these select ESOs would also have telephone access, they would be encouraged to undertake their own computer searches. Third, that users not located at the selected pilot test sites access the Information Center via telephone through an information specialist.

The first approach not only provides for efficient use of resources, but also assures that the Information Center is not seen as a competitor to existing library resources which are also in the business of information dissemination. Utilization of existing resources could, in addition, provide continuity to information services and motivate users to take greater advantage of existing

local resources. The second approach provides a means of evaluating the pros and cons of providing direct computer access to primary users. The third approach allows for the collection of statistical data which is important in the development and expansion of the Information Center's database.

Turnaround Time. Promptness in addressing requests was a unanimous request among potential users of the Information Center. Based on this understanding, InterAmerica has two recommendations for the design of the Information Center. They are:

- o to have a general policy of responding to requests as quickly as possible; and
- o to establish an advertised schedule of expected turn-around time when the Information Center is accessed via telephone.

Conclusion

The information acquired through the completion of the needs assessment activities provides a guide for the subsequent design of the Information Center. The recommendations summarized in this chapter, together with input from ARI and TAGO staff, as well as reality tests in the field will serve to define the following key design issues:

- o specification of priorities in serving primary and secondary user groups;
- o identification of the primary and secondary services to be offered to users;

- o specification of the limitations of services to be offered;
- o delineation of the scope and content of the database;
- o identification of the mechanism(s) for accessing the Information Center; and
- o determination of how user groups will be made aware of the Information Center and its services.

The project activities completed thus far provide substantial data relative to these issues. Activities currently underway should provide the additional information needed to identify the parameters for the proposed Information Center.

APPENDIX A

BSEP Needs Assessment Materials

INFORMATION RESOURCE CENTER QUESTIONNAIRE

Not to be shown to unauthorized personnel.
Not to be reproduced in any form without
the specific permission of the Technical
Director, Army Research Institute for the
Behavioral and Social Sciences, Office of
the Deputy Chief of Staff for Personnel,
Department of the Army.

PT5485

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INFORMATION RESOURCE CENTER QUESTIONNAIRE

The U.S. Army Research Institute (ARI) is conducting a needs assessment for the development of an information resource center with the goal of aiding policymakers and educational personnel in carrying out their mission as required by AR 621-5. The purpose of this questionnaire is to obtain information which would assist in the design of a information resource center with an emphasis on basic skills education.

An information resource center would be used by educators, ESOs and policymakers for a variety of functions which result in improved educational services offered by the Army. Users would be able to acquire information specific to their needs in a timely and useable format. Users would be able to interact with the information center through ARI by means of telephones, computers, or other means available at particular installations. Educational personnel would interact on an as required basis, to find solutions to their basic skills education needs. In addition, policymakers could request and obtain information needed to formulate educational policies about basic skills education programs.

Responses to this questionnaire will be used for research purposes only and will not be associated with or identify individual ESOs or individual installations. Responses will be compiled and used only in the aggregate.

Please return your questionnaire by close of business, April 15, 1982, to the ACES registration desk. Questions and/or remarks can be directed to:

Captain Brian Bush
Army Research Institute
5001 Eisenhower Ave.
Alexandria, VA 22333
AV 284-8694 or 284-8695
202-274-8694 or 274-8695

Dr. Rocco P. Russo
InterAmerica Research Associates, Inc.
1555 Wilson Blvd., Suite 600
Rosslyn, VA 22209
703-522-0870

INFORMATION RESOURCE CENTER QUESTIONNAIRE

1. Please state your duty position _____.
2. The name of your installation is _____.

Please supply the following data about the location of your installation by circling the appropriate response.

CONUS	If CONUS, which command?	TRADOC
USAREUR		FORSCOM
Far East		Other (specify) _____

3. Indicate for each of the following the degree to which you feel an information resource center would be useful to you in improving the educational programs at your installation.

	No Use	Slightly Useful	Moderately Useful	Extremely Useful
Reading	_____	_____	_____	_____
Listening	_____	_____	_____	_____
Writing	_____	_____	_____	_____
Computation	_____	_____	_____	_____
Psychomotor	_____	_____	_____	_____
English-as-a-Second Language	_____	_____	_____	_____
Life coping (e.g., civic responsibilities, health, economics, transportation, law, consumer education)	_____	_____	_____	_____
Needs assessment	_____	_____	_____	_____
Program evaluation	_____	_____	_____	_____
Quality assurance for adult/vocational programs	_____	_____	_____	_____
Contracting	_____	_____	_____	_____
Other (specify) _____	_____	_____	_____	_____

4. Place an "X" in each cell to indicate the areas in which you require additional information and/or assistance in order to make your educational programs more effective.

	EXAMPLE	Reading	Listening	Writing	Computing	Psychomotor	English as a Second Language	Life-Coping
Learning Materials (e.g., workbooks, filmstrips, videotapes)								
Curriculum Materials (e.g., lesson plans, teacher guides)	X							
Instructional Techniques (e.g., teaching methods, presentation of materials)								
Learning Strategies (e.g., rehearsal, mnemonics)	X							
Current Research (e.g., findings, implications)								
Computer Managed Instruction (e.g., CBI, CAI)								
Instructional System Design (e.g., development of programs, materials)	X							
Human Resources (e.g., subject area specialists, experts)								
Other (specify) _____ _____ _____								
Literacy Related Prerequisite Courseware								

5. For each of the following indicate the types of questions you feel an information resource center should answer for you. EXAMPLE: Reading--How to develop reading curriculum materials.

Reading: _____

Listening: _____

Writing: _____

Computation: _____

Psychomotor: _____

English
as a Second
Language _____

Life-coping: _____

6a. Rank the following services which you feel would be most helpful to you in improving the educational programs at your installations. A ranking of "1" would indicate the service most helpful to you.

- _____ Abstracts
- _____ Bibliography of materials
- _____ Current research summaries
- _____ Curricula
- _____ Literature search
- _____ Newsletter
- _____ Referral service
- _____ Toll free "800" telephone number
- _____ Other (specify) _____

6b. What general comments do you have about the goals which an information resource center should serve? _____

7. Indicate the appropriate turn-around time you feel an information resource center should provide responses. Circle the appropriate response.

- Same day requested
- 1 to 2 working days
- 3 to 4 working days
- 5 to 7 working days
- 8 to 10 working days
- longer

8. How often do you feel you would use an information resource center? Circle the appropriate response.

- | | | |
|---------|---------------|----------|
| Daily | Quarterly | Annually |
| Weekly | Semi-annually | Never |
| Monthly | | |

9. Do you feel you have a need for an information resource center designed to assist you in improving your educational programs? Circle the appropriate response.

- | | | |
|-----|----|------------|
| Yes | No | Don't Know |
|-----|----|------------|

10. Should the use of the information resource center be based on a reimbursable basis? Circle the appropriate response.

- | | | |
|-----|----|------------|
| Yes | No | Don't Know |
|-----|----|------------|

11. Indicate the type(s) of computer based instruction available at your installation by circling the appropriate response.

- | | |
|-----------|--------------------------------------|
| PLATO | APPLE |
| TICCIT | OTHER MICROCOMPUTERS (specify) _____ |
| VIDEODISC | OTHER (specify) _____ |

12. Please specify below the type of educational technology (both computer and non-computer based) forecasted for educational uses at your installation.

13. Indicate the perceived value of computer based instruction for basic skills educational programs. Circle the appropriate response.

No Value	Slightly Valuable	Moderately Valuable	Extremely Valuable
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14. Indicate the perceived value of computer based instruction for educational programs other than basic skills. Circle the appropriate response.

No Value	Slightly Valuable	Moderately Valuable	Extremely Valuable
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15. Please indicate below any additional comments or reactions.

THANK YOU FOR YOUR COOPERATION

Please return to the AGES registration desk
by close of business, April 15, 1982.

GUIDELINES FOR
INSTALLATION LIBRARY ASSESSMENT

Installation _____ Date _____

Name of library _____

Type of library:

_____ Popular
_____ Technical
_____ Medical

_____ Law
_____ Other (specify) _____

Audience the library serves _____

Size of collection:

Books _____ Technical Reports _____
Periodicals _____ Training Manuals _____
Audiovisual Materials _____ Other Documents _____

Major subject areas included in the collection _____

Staff available to provide assistance (number of professionals, number of non-professionals, full-time or part-time, etc.) _____

Service provided by the library:

- _____ Reference assistance
- _____ In-depth research assistance
- _____ Computerized information retrieval
- _____ Specify the computer systems available: _____
- _____ Routing new issues of journals to users
- _____ Ordering personal copies of documents for users
- _____ Interlibrary loan
- _____ Selectively disseminating new information that matches users' interest profiles
- _____ Publishing bibliographies, lists of new materials, etc.
- _____ Providing orientation or instruction in how to use the library

Please add any useful comments about these services or about the library in general on the back of this sheet.

**GUIDELINES FOR NEEDS ASSESSMENT
MACOM AND INSTALLATION INTERVIEWS**

- Objectives:**
- To gather information and identify needs for an information resource center with the goal of aiding Army educational personnel in carrying out their mission.
 - To identify issues of interest to various information resource center user groups.

Purpose: The purpose of this interview is to identify what information should be included in an information center and how that information should be made available to users.

An information resource center could be used by educators, ESOs, and policy-makers for a variety of functions which result in improved educational services offered by the Army. Users would be able to acquire information specific to their needs in a timely and useable format. Users would be able to interact with the information center through ARI by means of telephones, computer terminals or other means available at particular installations. Educational personnel could interact on an as required basis, to find solutions to their education needs. In addition, policy-makers could request and obtain information needed to formulate educational policies about education programs.

- **Installation:**
- **Date:**
- **Name and Duty Position:**
- **Description of the Installation (size, number of soldiers, number of programs) :**

- What duties are you responsible for that require retrieval of current information?

- Would you use or do you need an information center designed to assist you in improving your educational program?

- What are your current information needs? (curriculum, personnel, evaluation)

- In the past four weeks, what information needs have you had?

- How did you go about meeting those information needs?

- What information sources do you currently use?

- What procedures do you follow in obtaining or retrieving information?

- What data bases are currently available to you?

- What types of computer based or computer assisted instruction are available at your installation?

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- How are your current information needs different from your future needs?

- What plans do you have to satisfy your information needs in the future?

- Suppose that you had access to an information center. How would the information center be most useful to you?

- What services would you like to see available in an information center?
(Services might include:)

information on subject areas

kinds of information (abstracts, syntheses, bibliography, current research, summaries, curricula, literature search)

types of materials

referral service

telephone contact

computer access

newsletter

other

- In what format or to what detail would you want information provided?
- What do you feel would be appropriate turn-around time for an information center to provide responses?

Same day requested	5 to 7 working days
1 to 2 working days	8 to 10 working days
3 to 4 working days	longer

- How would you want to access an information center?
- Would you use the information center?
- How often would you use an information center?
- If it were necessary to charge for services would you be willing to use the information center on a reimbursable basis?
- Who do you feel (other than yourself) would be potential users of the information center?

Other comments:

LIST OF QUESTIONS FOR BASIC SKILLS TAGO INTERVIEWS

- To gather information and identify needs about a Basic Skills Information Center
- To identify issues of interest to various user groups

Everyone may not be able to, or wish to, answer all questions. This list is presented to stimulate areas of need, interest, or concern; to find out what people are excited about, what they expect from an Information Center, or what they would like to see developed.

1. Name _____
2. Duty Position _____
3. Name of installation and branch or function _____

4. From your perspective, what should an Information Center try to accomplish?

5. In your view, what should be the priorities of an Information Center?

6. What are your current information needs?

7. How do you see this as different from your future needs, if at all?

8. How could an Information Center be most useful to you?

9. What problems do you have that an Information Center might resolve?

10. What would you like to see available in an Information Center?

a. Subject areas _____

b. Types of materials _____

c. Abstracts _____

d. Synthesis _____

e. Telephone Contact _____

f. Computer access _____

g. Other _____

11. What are you using now for your information needs?

12. What system of available data bases do you use?

13. What information system is currently most effective?

14. How would you want to access an Information Center?

15. How often would you use an Information Center?

16. What type of information would you typically request?

17. What format of information storage and retrieval would make access easiest for you?

18. Who do you feel (other than yourself) would be potential users of the Information Center?

19. How many potential users are there in each group?

- a. Policy makers _____
- b. Researchers _____
- c. Practitioners _____

Other

GUIDELINES FOR NEEDS ASSESSMENT
ARI INTERVIEWS

- Objectives:
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- Date:
- Name and Duty Position:

- Would you use or do you need an information center designed to assist you in your work?

- What are your current research and information needs? (curriculum, research, personnel, evaluation)

- How do you go about meeting those information needs?

- What information sources do you currently use?

- What procedures do you follow in obtaining or retrieving information?

- What data bases are currently available to you?

- What types of computer software or hardware are available to you?

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- In what format or to what detail would you want information provided?

- What do you feel would be appropriate turn-around time for an information center to provide responses?

Same day requested	5 to 7 working days
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- How would you want to access an information center?

- Would you use the information center?

- How often would you use an information center?

- If it were necessary to charge for services would you be willing to use the information center on a reimbursable basis?

- Who do you feel (other than yourself) would be potential users of the information center?

Other comments:

- How are your current research and information needs different from your future needs?

- What plans do you have to satisfy your information needs in the future?

- Suppose that you had access to an information center. How would the information center be most useful to you?

- What services would you like to see available in an information center?
(Services might include:)

information on subject areas

kinds of information (abstracts, syntheses, bibliography, current research, summaries, curricula, literature search)

types of materials

referral service

telephone contact

computer access

newsletter

other

APPENDIX B

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