Research Report 1350

A Guide to Implementation of Training Products

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This guide describes a strategy for implementing new training products in operational units of the U. S. Army. The purpose is to help the training developer ensure that units use and sustain new products once they are introduced. The procedures outlined here can assist in identifying potential implementation problems, planning and executing a well designed implementation program, and monitoring the entire implementation process. Implementation occurs in four stages: orientation, fielding, trial and integration. For

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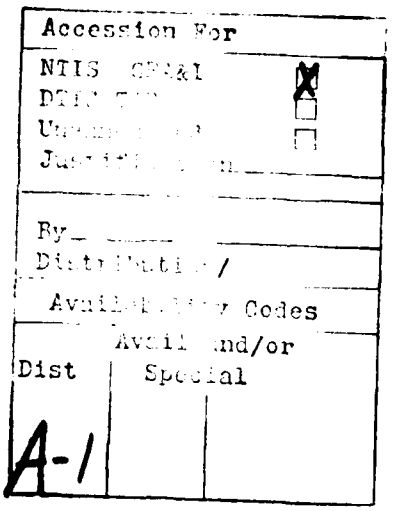
each stage, the guide describes how concerned individuals and agencies prepare, execute, and monitor implementation. Using this guide will assist training product managers in coordinating the efforts of developers, sponsors, and users of U.S. Army training products.



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FOREWORD

The Presidio of Monterey Field Unit has an ongoing program of research on Army unit training. One facet of this research is an examination of why and how some training innovations are used by operational units while others are ignored. The problem of non-use is Army-wide and has been called the "implementation gap."

At root, implementation gaps exist because of a lack of communication between the training developer and the operational units which are expected to use the innovation. All training innovations require time for units to study the innovation, understand its advantages and where it fits into unit training, decide what resources it requires, and to incorporate it fully into the routine training system. During this time, even the best training innovation needs support, and providing, planning, and orchestrating this support requires the cooperation of the developer, MACOM headquarters, and user units.

This guide provides a roadmap to help TRADOC developers and the headquarters of MACOMS plan the implementation of a training innovation. When used before the innovation is fielded, the guide will lead to a consideration of the problems the innovation will encounter and to the development of strategies or support needed to overcome those problems. The goal is to support the training innovation through the critical fielding phase until it achieves the status of routine and effective use.

Fuller discussion of the "implementation gap" problem is provided by ARI Research Report 1344 entitled *On Closing the Implementation Gap: Symposium Proceedings* (in press).

EDGAR M. JOHNSON
Technical Director

EXECUTIVE SUMMARY

A GUIDE TO IMPLEMENTATION OF TRAINING PRODUCTS

Requirement:

This guide describes a strategy for implementing new training products in US Army units. Its purpose is to help the training product manager ensure that operational units use and sustain new products once they are introduced. This guide will assist the product manager in planning, executing and monitoring an implementation effort that begins when the product is developed and ends when it is fully integrated into training in units.

The guide was developed because there is little information available at present on how to implement new training products to ensure that they are used as intended. The Army already has methods for developing a product (see US Army Training and Doctrine Command, TRADOC Pamphlet 350-30 Interservice Procedures for Instructional Systems Development, for example), for using a product in unit training (e.g., Training Circulars and Training Manuals), and for evaluating product effectiveness (e.g., TRADOC Pamphlet 71-8 Analyzing Training Effectiveness). This guide bridges the gap between development on the one hand and use and evaluation on the other. Without efforts by product managers in this critical area, a demonstrably effective training innovation may, after delivery to the field, never be used.

Product:

The guide was developed based on studies conducted during an evaluation of the implementation of MILES, the Multiple Integrated Laser Engagement System. This Tactical Engagement Simulation (TES) was expected to face a wide range of implementation problems; accordingly, a monitoring effort was begun to track the progress of MILES fielding and to identify any implementation difficulties. During 1979-80 a model entitled *A Strategy for Coping With Change* in Army training was developed. The strategy was then translated into the present practical guide to assist product managers in the implementation of training products which are to be exported to operational units.

Use:

The guide first provides procedures for doing an implementation analysis to identify problems likely to be encountered during implementation. It then presents a method for planning an implementation effort to integrate a specific product into a particular training environment.

CONTENTS
A GUIDE TO IMPLEMENTATION OF TRAINING PRODUCTS

LIST OF FIGURES

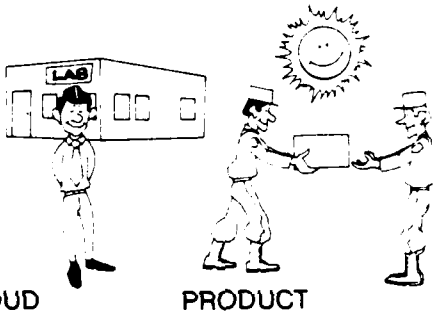
A GUIDE
TO IMPLEMENTATION
OF TRAINING PRODUCTS

INTRODUCTION
THE NEED FOR A GUIDE TO IMPLEMENTATION

The United States Army develops, implements and uses its own training products. This life-cycle control is an advantage, but some problems occur in meshing the efforts of developers, such as US Army Training and Doctrine Command (TRADOC) and US Materiel Development and Readiness Command (DARCOM), user units, and Operational Major Army Command (MACOM) sponsors. Each command is primarily concerned with its mission, and often a gap occurs between product hand-off and product use. For example, a developer may send a high-quality but difficult-to-use product to the field. Users try to continue training and can't find time to gear-up for the new product. Unused products begin to stack up in user units, and an implementation gap opens.

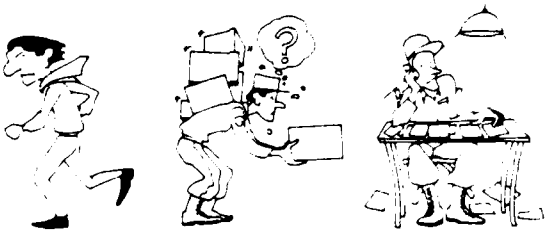
This guide is designed for the product manager of a new training product. It presents a procedure, not only for issuing a product to the field, but also for ensuring that it is used as intended.

IMPLEMENTATION FROM THE DEVELOPER'S POINT OF VIEW



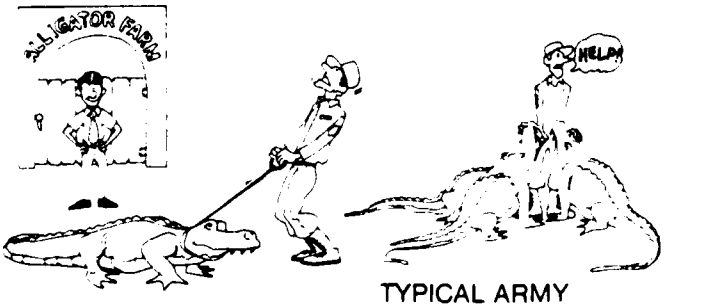
PROUD DEVELOPER | PRODUCT MANAGER | NEEDY USER

IMPLEMENTATION FROM THE PRODUCT MANAGER'S POINT OF VIEW



ABSENT DEVELOPER | OVERBURDENED PRODUCT MANAGER | UNINTERESTED USER

IMPLEMENTATION FROM THE USER'S POINT OF VIEW



JUST ANOTHER PRODUCT | TYPICAL ARMY TRAINING ENVIRONMENT

THE BENEFITS OF A GUIDE TO IMPLEMENTATION

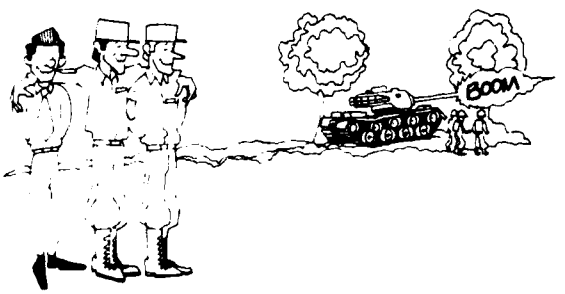
The bottom line of training product implementation is improved training in operational units. All other activities are means to this end. This guide will further good training in three ways.

It will:

- **FOCUS ON USE AND SUSTAINMENT OF TRAINING PRODUCTS IN USER UNITS.** The purpose of every recommended action and guideline is to increase the operational unit's ability to accept, operate, manage and control a new training product.

- **ESTABLISH PROCEDURES TO CO-ORDINATE THE EFFORTS OF ALL THE MAJOR AGENCIES IN THE IMPLEMENTATION PROCESS.** Included here are formal planning and negotiation steps which will bridge the efforts of TRADOC, DARCOM and other MACOMs concerned with implementation of training products. The guide first becomes useful during the full-production and deployment phase of the Life Cycle System Management Model for Army Systems (Department of the Army Pamphlet 11-25) when users need to be informed that a product is on its way to the field. The steps in this guide correspond to the Implementation and Control Stages of the Interservice Procedures for Instructional Systems Development Model (TRADOC Pamphlet 350-30) *for introducing* training products into TRADOC *resident training programs*. This guide is tailored specifically to introducing and sustaining exportable training products in *operational units*.

- **BUILD-IN FEEDBACK TO CONTROL IMPLEMENTATION.** Some problems — ammunition shortages, maintenance requirements etc. — can be predicted in advance. Other problems can only be detected by monitoring product use in units. It is impossible to predict, for example, how individuals will react to a new product, whether or not they will dislike the product for a non-rational reason. No one knows the overall effects on the training system as a whole; perhaps the product will drain resources from other vital activities. Continued monitoring, using the procedures in this guide, can alert the product manager to problems which arise as the product becomes integrated into Army training.



ORGANIZATION OF THE GUIDE

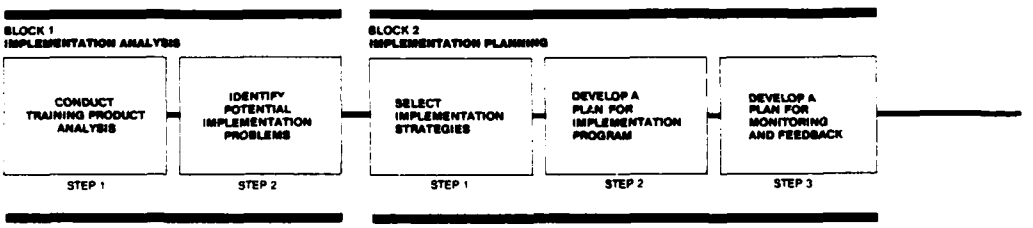
This guide is intended for you, the persons or agencies responsible for implementing exportable training products for US Army training. The guide organizes your effort into four major blocks as shown in Figure 1.

BLOCK 1

Perform an implementation analysis to determine what effort is necessary to get your product used. First conduct a training product analysis; then use the product analysis to identify potential implementation problems.

BLOCK 2

If an implementation effort is necessary, select implementation strategies, develop a plan for an implementation program, and develop a plan for monitoring and feedback.



Throughout this guide worksheets are provided to help you develop and carry out a successful implementation program for your particular training product. These worksheets are not highly detailed, because different kinds of preparations, execution actions and success indicators will apply for implementation of different kinds of products. The worksheets are designed so that you can use your knowledge of the product to fill in the proper level of detail.

Throughout the rest of the guide, Figure 1 is reproduced in miniature with appropriate boxes highlighted to serve as a roadmap and reference guide.

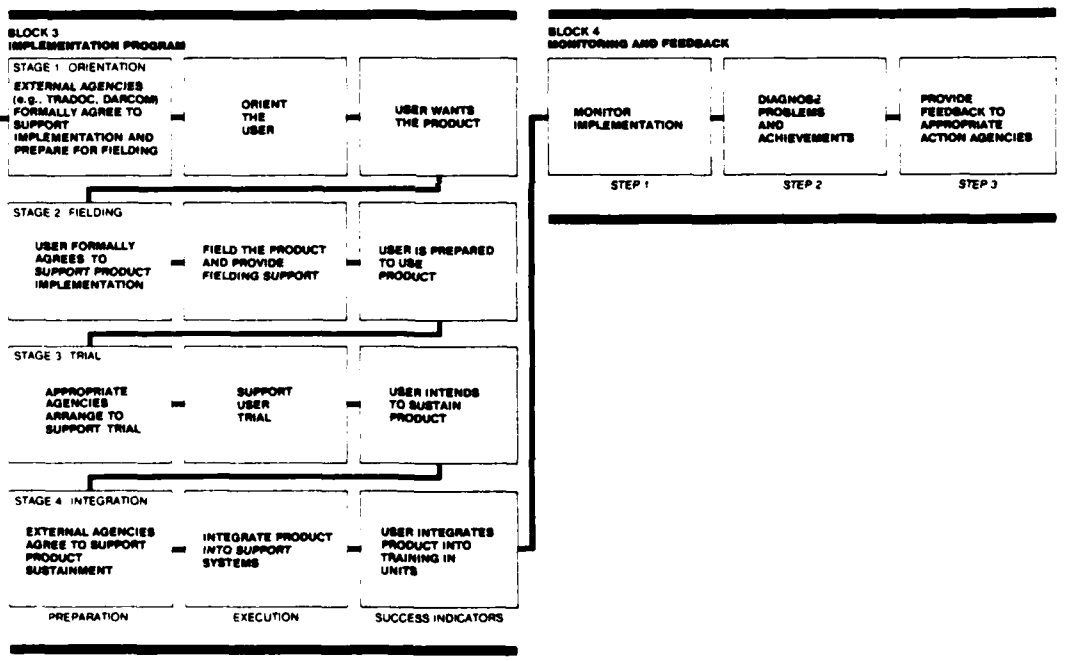
FIGURE 1
OVERVIEW
A GUIDE TO IMPLEMENTATION OF TRAINING PRODUCTS

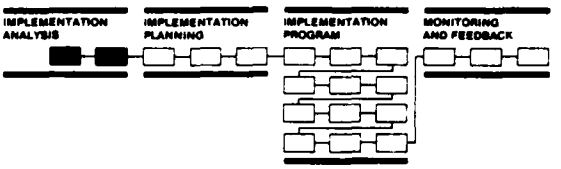
BLOCK 3

Execute an implementation program. Such a program is composed of four stages: 1) Orientation, 2) Fielding, 3) Trial, and 4) Integration. Each stage has a preparation, execution, and success-indicator component.

BLOCK 4

Conduct monitoring and feedback during the Implementation Program: diagnose problems and achievements, and provide feedback to appropriate action agencies.





BLOCK 1
IMPLEMENTATION ANALYSIS

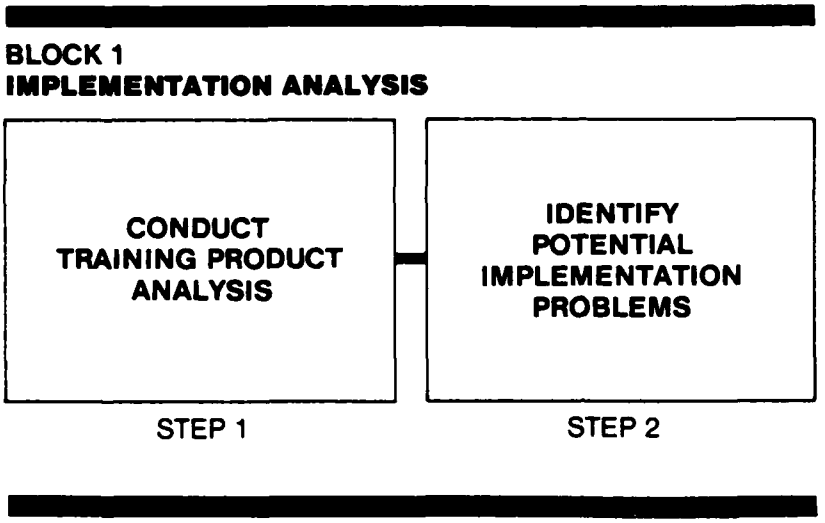
If you have a training product to export, an implementation analysis will estimate what kind of effort will be needed to get it used. An implementation analysis has two steps as shown in Figure 2.

- **CONDUCT A TRAINING PRODUCT ANALYSIS:** Clearly describe the features of the product which are important to implementation.

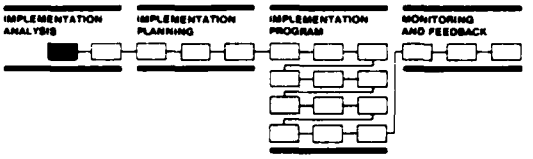
- **IDENTIFY POTENTIAL IMPLEMENTATION PROBLEMS:** Analyze how well the product is going to fit into training given 1) the kind of soldiers who will use and manage it and 2) the kind of units to which it is being sent.

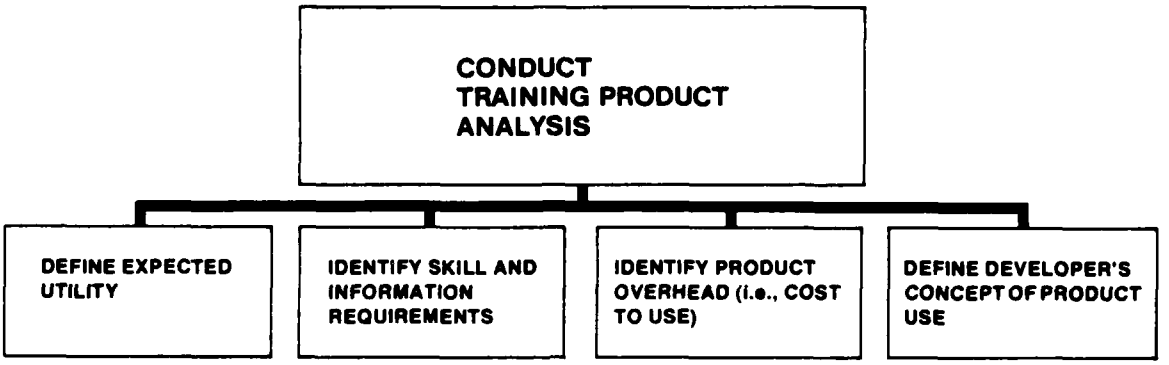
A good implementation analysis will put your implementation program right on target. It will direct attention to the real problems and provide a convenient checklist to see that no important details are overlooked. Let's now look at each step in the Implementation Analysis.

FIGURE 2
BLOCK 1
IMPLEMENTATION ANALYSIS



IMPLEMENTATION ANALYSIS
CONDUCT TRAINING PRODUCT ANALYSIS
STEP 1





Since the nature of the product determines the manner in which it should be implemented conduct a training product analysis on those features of your product that need to be examined.

- **DEFINE EXPECTED UTILITY:** What is the product supposed to do for the user? Will it improve collective or individual training performance, reduce current training cost, help commanders improve their diagnostic feedback for training? A clear statement of utility could prove to be your biggest selling point.
- **IDENTIFY SKILL AND INFORMATION REQUIREMENTS:** What do soldiers have to know and do to use and sustain the product properly? A good task analysis will tell how hard the product is to operate.
- **IDENTIFY PRODUCT OVERHEAD:** What is the product going to cost to use? Will it require additional ammunition, or support personnel? A realistic cost assessment will greatly assist the user in planning to manage the product.
- **DEFINE THE DEVELOPER'S CONCEPT OF PRODUCT USE:** How is the product supposed to be used? It is designed for collective or individual training, training evaluation, for use with squads, companies, battalions? A good concept of use must fit well into the way the Army currently plans, prepares, conducts and evaluates training.

Completing a worksheet such as the one shown in Figure 3 will help you in conducting the training product analysis.

FIGURE 3
WORKSHEET FOR
TRAINING PRODUCT ANALYSIS

CONDUCT
TRAINING PRODUCT ANALYSIS
Use OT/DT results, FEAs, concept studies, etc. to identify these features of the product

Define expected utility:

1. Performances that will be improved:

2. Training costs that will be reduced:

3. Improvements in evaluation and feedback:

4. Improvements in delivery of training:

Identify skill and information requirements:

1. Skills users must possess to use and maintain:

2. Information that users must have to use product effectively:

Identify product overhead (i.e., cost to use):

1. Training and support personnel:

2. Time for set up, use, take-down:

3. Facilities for use, storage and maintenance:

4. Accountability and record-keeping requirements:

5. Consumable supplies required to support proper use (e.g., batteries):

Define developer's concept of product use:

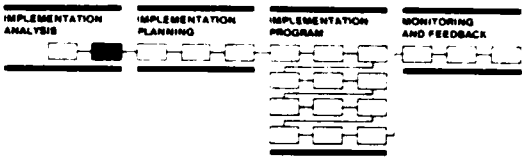
1. Location where it will be used (schools or units? field or classroom?):

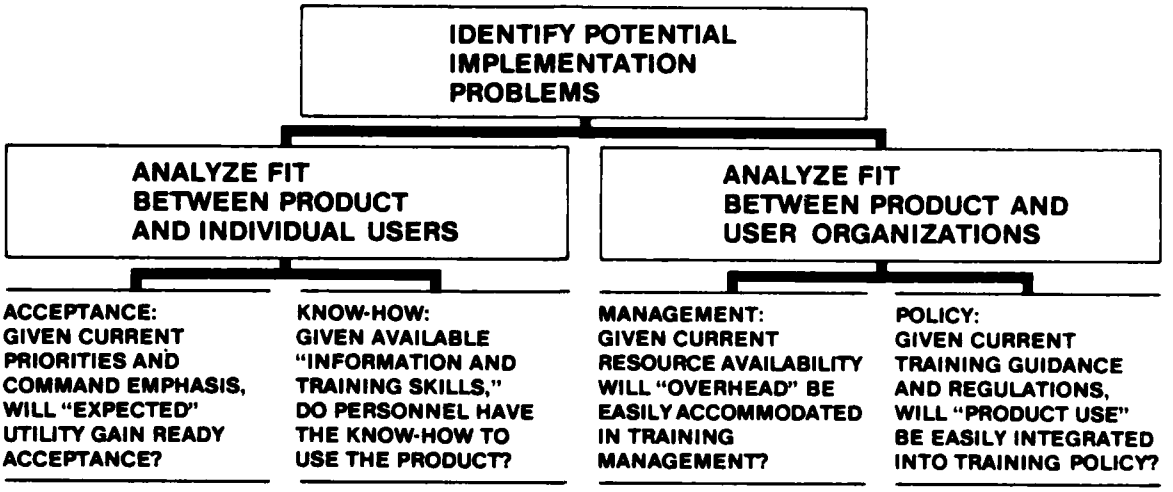
2. Type of training it will support (collective or individual? for which individuals or units?):

3. Where it will fit in the training system, (e.g., training support package for a weapons system, or a product to support the training system or a complete training system):

4. Expected frequency of use:

IMPLEMENTATION ANALYSIS
IDENTIFY POTENTIAL IMPLEMENTATION PROBLEMS
STEP 2





New products can cause problems for individual users and for the operational units by making demands on people's time and units' resources. Identifying potential implementation problems will determine how difficult implementation is likely to be.

- **ANALYZE FIT BETWEEN PRODUCT AND INDIVIDUAL USERS.** Based on the training product analysis (Pg. 9) and your knowledge of the training environment determine whether your product will be readily accepted and whether user personnel have the know-how to use the product.

  GIVEN CURRENT PRIORITIES AND COMMAND EMPHASIS WILL THE "EXPECTED UTILITY" GAIN READY *ACCEPTANCE?*

  GIVEN AVAILABLE "INFORMATION AND TRAINING SKILLS," DO PERSONNEL HAVE THE *KNOW-HOW* TO USE THE PRODUCT?

- **ANALYZE FIT BETWEEN PRODUCT AND USER ORGANIZATIONS.** Based on the training product analysis (Pg 9) and your knowledge of the training environment determine whether user units can manage the product overhead and regulate product use within the framework of current policies.

  GIVEN CURRENT RESOURCE AVAILABILITY WILL "OVERHEAD" BE EASILY ACCOMMODATED IN TRAINING *MANAGEMENT?*

  GIVEN CURRENT TRAINING GUIDANCE AND REGULATIONS, WILL PRODUCT USE BE EASILY INTEGRATED INTO TRAINING *POLICY?*

If additional information about the current training environment is needed, ask people in the operational units about priorities and command emphasis, and collect from these units available information on training skills, resource availability and training guidance and regulations.

If you find any cases where the intended users do not value the product's expected utility (e.g., training benefits) or where users can not operate, afford or regulate the product, you have discovered a potential implementation problem. By continuing through this guide, you can develop a program to prevent these problems from occurring or at least to keep track of them so you will know if your product gets into trouble. Completing a worksheet such as the one shown in Figure 4 will help you to identify potential implementation problems.

FIGURE 4
WORKSHEET FOR IDENTIFYING POTENTIAL IMPLEMENTATION PROBLEMS

IDENTIFY POTENTIAL IMPLEMENTATION PROBLEMS
Using results of training product analysis (pg. 9) and your knowledge of the user environment, answer these questions

ACCEPTANCE: Give current priorities and command emphasis will "expected utility" gain ready ACCEPTANCE?

☐ YES ☐ NO
If no, what is the problem?
For training managers:

For trainers:

KNOW-HOW: Given available "information and training skills," do personnel have the KNOW-HOW *to use the product*?

☐ YES ☐ NO
If no, what special training or instruction is needed?
For training managers:

For trainers:

For trainees:

MANAGEMENT: Given current resource availability will "overhead" be easily accommodated in training MANAGEMENT?

☐ YES ☐ NO
If no, what additional resources do they need?
Personnel:

Time:

Space:

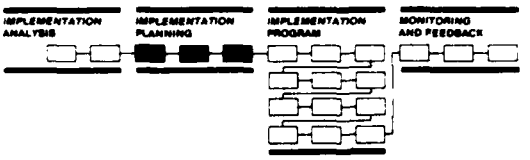
Funds:

Consumables:

POLICY: Given current training guidance and regulations will "product use" be easily integrated into training POLICY?

☐ YES ☐ NO
If no, cite regulations which conflict with implementation envisioned.

BLOCK 2
IMPLEMENTATION PLANNING



Once the need for an implementation program is identified, it is time to plan. Implementation Planning has three basis steps as shown in Figure 5.

- **SELECT IMPLEMENTATION STRATEGIES:** Not all implementation problems can be solved in the same way. Different problems require different strategies. There are two fundamental kinds of strategies to choose from: enabling strategies, which educate and assist with the product use, and incentive strategies, which motivate and regulate product use.

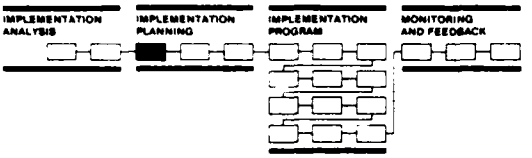
- **DEVELOP A PLAN FOR THE IMPLEMENTATION PROGRAM:** A good implementation plan 1) determines the sequence or stages in the proposed program, 2) specifies the actions to be taken during each stage, i.e., the execution of the program, 3) assigns responsibility for actions to developers, users and supporters of the product and 4) specifies desired outcomes or success indicators for the program.

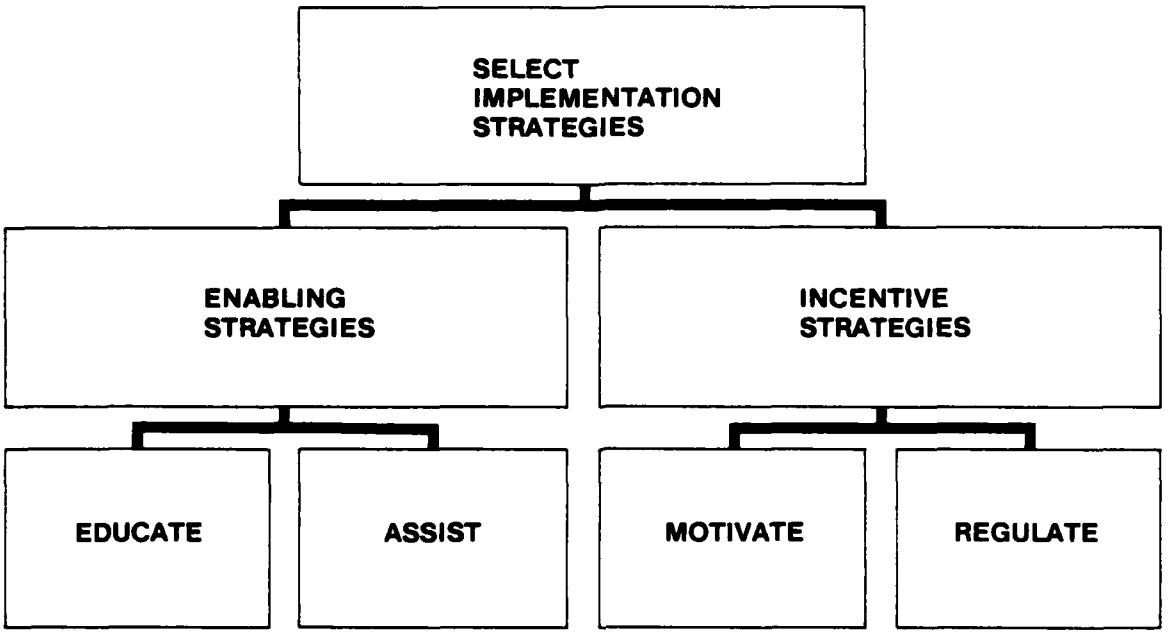
- **DEVELOP A PLAN FOR MONITORING AND FEEDBACK:** Monitoring and feedback keep an implementation program on track and make timely adjustments possible. A plan for monitoring and feedback 1) identifies agencies needing information about progress of the implementation program, 2) develops a schedule for monitoring and feedback and 3) identifies potential information sources and information collection strategies.

The following pages contain instructions and worksheets for developing an implementation plan for Army exportable training products.

FIGURE 5
BLOCK 2
IMPLEMENTATION PLANNING

IMPLEMENTATION PLANNING
SELECT IMPLEMENTATION STRATEGIES
STEP 1





There are two fundamental kinds of implementation strategies, each of which divides into two parts, as shown above.

- **ENABLING STRATEGIES** make a user capable of using a product.
  - EDUCATE: Retrain or provide information which will enable people to use the product.
  - ASSIST: Provide any necessary resources or services which are not ordinarily available to the user organization.
- **INCENTIVE STRATEGIES** make personnel and units more likely to accept and use the product.
  - MOTIVATE: Persuade soldiers and leaders to believe in the product and make them want to use it properly.
  - REGULATE: Control the activities of individuals and units through policies, regulations and doctrine to ensure high quality use of the product.

The right strategy depends on the type of problem you have. It doesn't help to motivate people and get them excited about a product if they lack the skills to use it. Nor is it wise to field expensive, complex technology if the Army is not going to regulate its use.

Completing a worksheet such as is shown in Figure 6 will help you to select implementation strategies.

FIGURE 6
WORKSHEET FOR SELECTING IMPLEMENTATION STRATEGIES

Using the list of potential implementation problems you have identified (pg. 11), answer this question

WHAT KIND OF IMPLEMENTATION PROBLEM HAVE YOU IDENTIFIED?

ACCEPTANCE
Which solution do you think is best for GAINING ACCEPTANCE OF THE PRODUCT?

Increase product utility with further development List problem and potential solution in **MODIFY PRODUCT** box	Persuade key users they really need the product List problem and potential solution in **MOTIVATE** box	Have MACOMs require use of the product List problem and potential solution in **REGULATE** box

KNOW-HOW
Which solution do you think is best to ENSURE ADEQUATE KNOW-HOW?

Change product to simplify user task rqts List problem and potential solution in **MODIFY PRODUCT** box	Inform/train users in new skills List problem and potential solution in **EDUCATE** box	Provide special skills thru outside agencies List problem and potential solution in **ASSIST** box

MANAGEMENT
Which solution do you think is best for ENSURING ADEQUATE MANAGEMENT OF OVERHEAD?

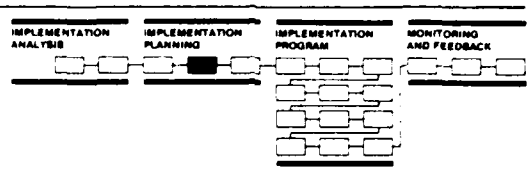
Reduce resource demands and management rqts of product List problem and potential solution in **MODIFY PRODUCT** box	Modify existing training management procedures List problem and potential solution in **ASSIST** box	Provide additional resources List problem and potential solution in **ASSIST** box

POLICY
Which solution do you think is best for INTEGRATING PRODUCT INTO POLICY?

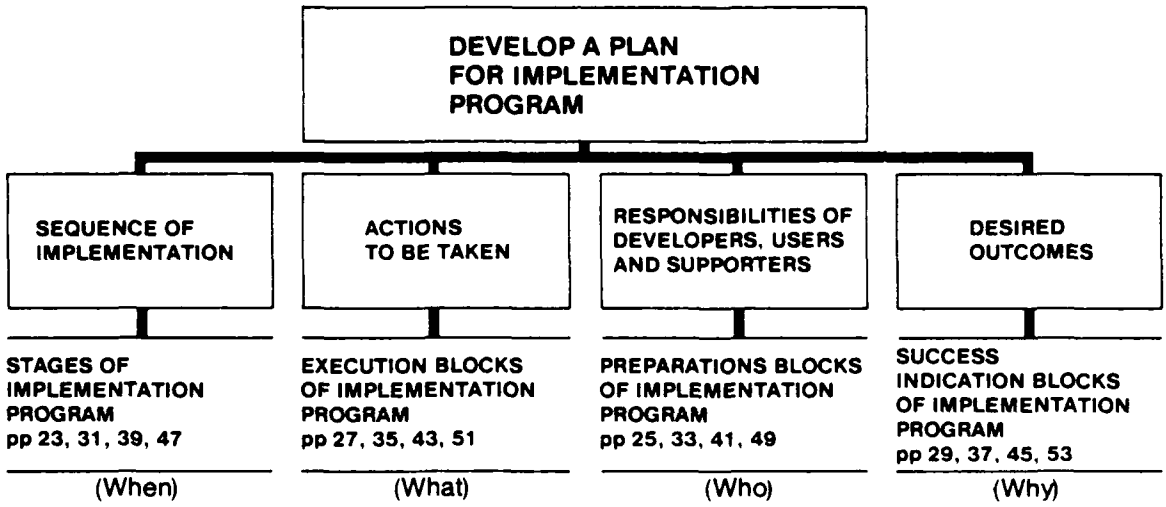
Adjust recommended concept of use List problem and potential solution in **MODIFY PRODUCT** box	Modify existing training policies List problem and potential solution in **REGULATE** box	Develop new training guidelines List problem and potential solution in **REGULATE** box

MODIFY PRODUCT
EDUCATE
ASSIST
MOTIVATE
REGULATE

IMPLEMENTATION PLANNING
DEVELOP A PLAN FOR IMPLEMENTATION PROGRAM
STEP 2



Until now this guide has preceded step by step with the reader reading the left-hand page and filling out the right hand worksheet. At this point the procedure changes. Although we are still in the planning portion of the implementation process, this step consists of filling out worksheets which will be used in Block 3 (Implementation Program). Completing the worksheets according to instructions on these two pages (Pg. 16, 17) will provide you with a plan to be used during the Implementation Program (Block 3). Fill out the worksheets from pages 25-53 now and use them later.

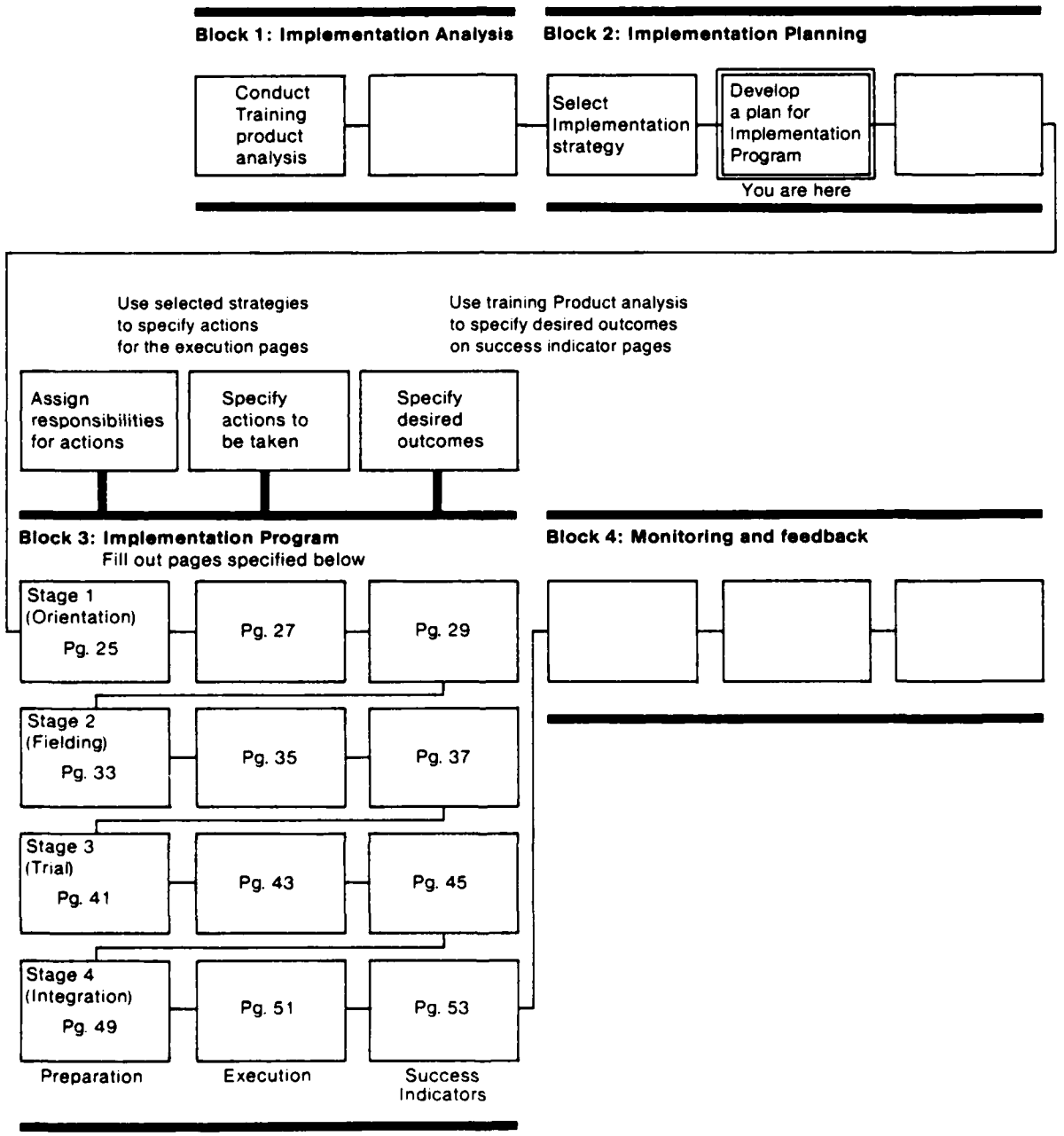


The parts of a plan for an implementation program are shown in Figure 7.

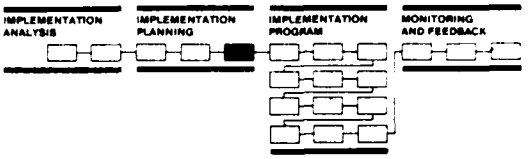
- **THE SEQUENCE OF IMPLEMENTATION:** The implementation section of this guide breaks implementation into four stages: 1) Orientation — the user finds out about a product which is coming; 2) Fielding — the product arrives; 3) Trial — the user tries the product out; and 4) Integration — the product becomes a part of Army training.
- **ACTIONS TO BE TAKEN:** Use the strategies selected on Page 15 to determine which actions should be taken at each of the four stages. For example, if education is a solution to your problem go to Page 27 and decide what sort of education is necessary to *orient* the user. Go to Page 35 to decide what sort of education is necessary in *fielding*. Go to Page 43 to decide what sort of education is necessary for *trial*. Go to Page 51 to decide what sort of education is necessary for *integration*.
- **RESPONSIBILITIES OF DEVELOPERS, USERS AND SUPPORTERS:** When you know what actions to take at each stage, determine which agencies should make the necessary preparation and take that action. For example, Page 25 provides a worksheet for planning roles and responsibilities during the Orientation Stage. Page 33 is for Fielding, Page 41 for Trial, and Page 49 for Integration.
- **DESIRED OUTCOMES:** Use the results of the training product analysis (Page 9) to specify the desired outcomes which will indicate success at each stage in the Implementation Program. Page 29 provides a worksheet for specifying outcomes for the Orientation Stage. Page 37 is for Fielding, Page 45 for Trial, and Page 53 for Integration.

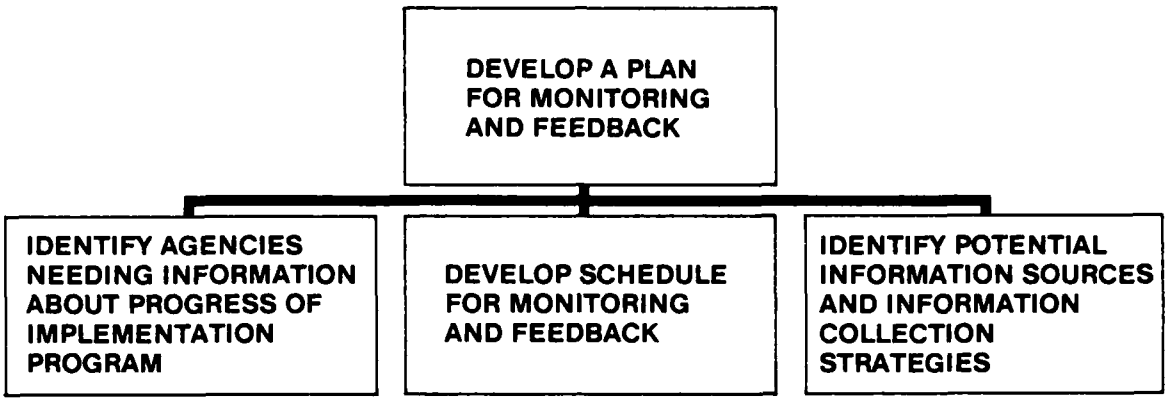
FIGURE 7
DEVELOP A PLAN FOR THE IMPLEMENTATION PROGRAM

Use appropriate pages of this guide to translate the product analysis (pg. 9) and the selected implementation strategy(ies) (pg. 15) into a plan for the implementation program.



IMPLEMENTATION PLANNING
DEVELOP A PLAN FOR MONITORING AND FEEDBACK
STEP 3





The last step before executing an implementation program is to develop a plan for monitoring and feedback which will keep track of progress toward implementation. Using the implementation program plan on Pages 25 to 53 take the following three actions:

- **IDENTIFY AGENCIES NEEDING INFORMATION ABOUT PROGRESS OF THE IMPLEMENTATION PROGRAM.** Establish channels of communication with the agencies identified in the preparation steps (Pg. 25, 33, 41, 49) of the implementation program. These agencies will need feedback to coordinate and fine-tune their plans. TRADOC agencies, such as the Infantry and Armor schools, will need feedback on training support, DARCOM/ US Army Armament Materiel Readiness Command (ARRCOM) agencies will need materiel support information, and so on.

- **DEVELOP A SCHEDULE FOR MONITORING AND FEEDBACK.** Set dates for obtaining information about each step in the implementation program. The schedule will vary with the product, but information needs to be collected in time to guide the action of concerned agencies at each stage of implementation.

- **IDENTIFY POTENTIAL INFORMATION AND INFORMATION COLLECTION STRATEGIES.** Use all the steps in the implementation program — Preparation, Execution and Success Indicators — to specify essential elements of analysis (EEA) and identify possible data sources. Select appropriate data sources from the agencies indicated for action.

With a monitoring and feedback plan which follows the implementation program closely, you can be sure of detecting any emerging problems in time to take corrective action.

Completing a worksheet such as the one shown in Figure 8 will help you to develop a plan for monitoring and feedback.

FIGURE 8
WORKSHEET FOR DEVELOPING A PLAN FOR MONITORING AND FEEDBACK

DEVELOP A PLAN FOR MONITORING AND FEEDBACK
Using the implementation program plan (Pgs. 25 to 53) do these three things

Identify agencies needing information about progress of the implementation program

Establish channels of communication with agencies identified in preparation phase (Pgs. 25, 33, 41, 49) of implementation program.

TRADOC agencies:	DARCOM/ ARRCOM agencies:	Operational MACOM agencies:
USAIS	PM TRADE, IF appropriate	Project Office, if any
USAARMS		

Identify potential information sources and *information collection strategies*

Use all phases in the implementation program plan to specify essential elements of analysis (EEA) and to identify possible data sources. Select appropriate methods for obtaining the data. For example, data collection may require soliciting selected documents, *surveying user opinions, reviewing routinely recorded* training information (e.g., maintenance records or readiness reports), and observing in the field. A possible format for data recording is shown on page 57 of this guide.

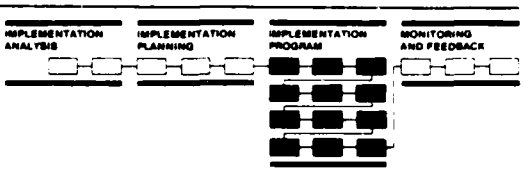
Develop schedule for monitoring and feedback

Set dates for obtaining information about each phase in the implementation program. For example, you might anchor the monitoring schedule at product delivery as shown below:

IMPLEMENTATION PROGRAM

-12 mos	-8 mos	-6 mos
-4 mos	Product Delivery Date	+2 mos
+4 mos	+6 mos	+8 mos
+10 mos	+12 mos	+24 mcs
Preparation Phases	Execution Phases	Success Indicator Phases

BLOCK 3
THE IMPLEMENTATION PROGRAM



The Implementation Program tracks a product from its production and deployment to obsolescence. The program is composed of four stages, and each stage has three phases, as is shown in Figure 9.

The stages consist of:

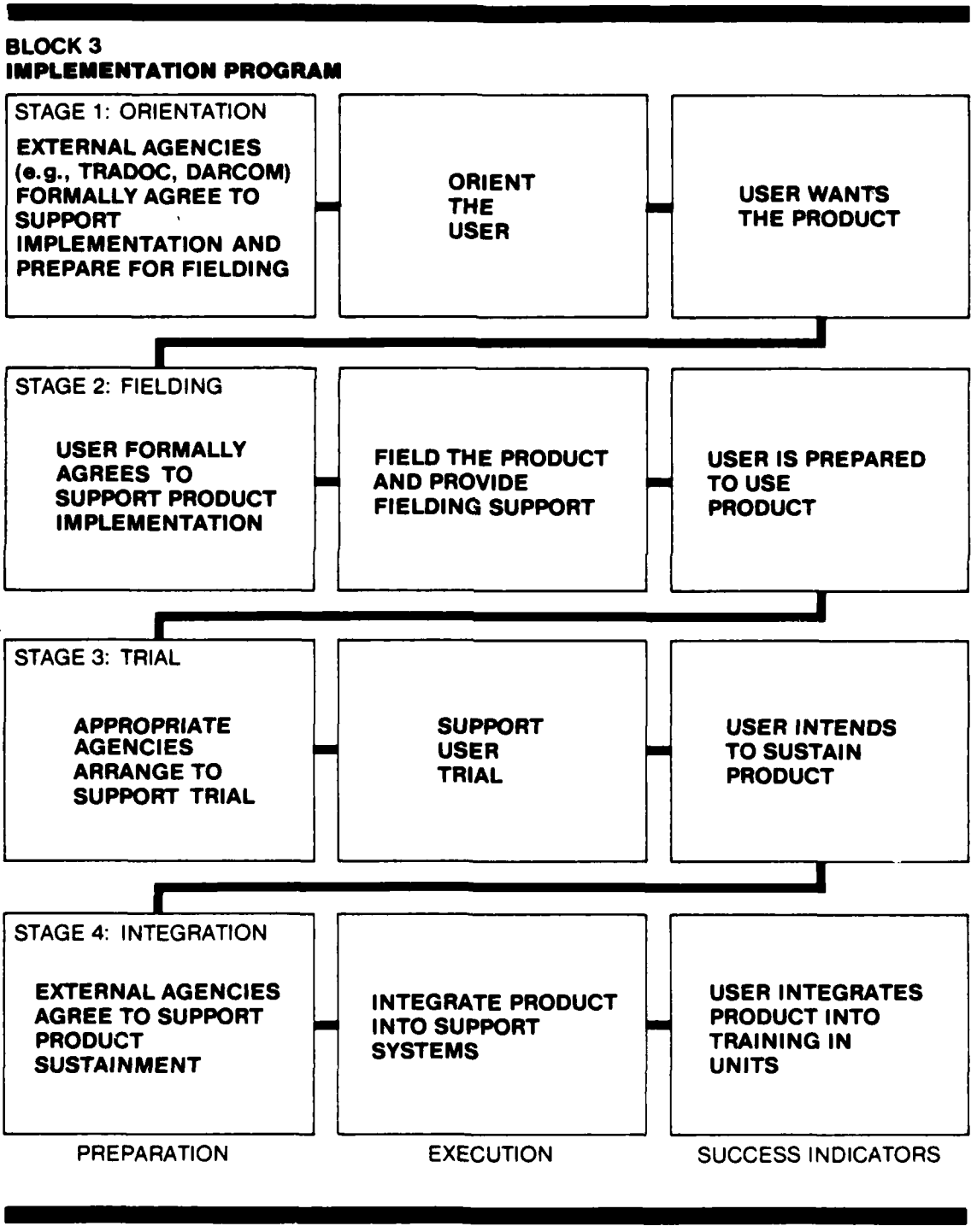
- **ORIENTATION:** The user learns about the product which is coming.
- **FIELDING:** The product is delivered and the user prepares to implement.
- **TRIAL:** Users receive support from external agencies (e.g. TRADOC, DARCOM) in using the product.
- **INTEGRATION:** The product becomes a standard part of training in units.

The three phases in each stage are:

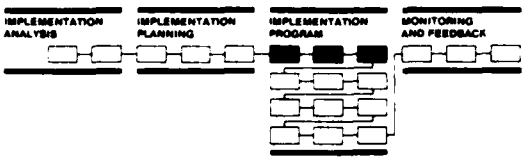
- **PREPARATION:** Agreements are reached and arrangements are made to introduce the product, provide implementation support and ensure that the product gets integrated.
- **EXECUTION:** Actions are carried out by agencies external to the receiving unit to introduce the product and support its use.
- **SUCCESS INDICATORS:** Steps are taken by users to learn about the product, to use it, and finally to integrate it into their philosophy and training practice.

By now you have filled out all the worksheets for the Implementation Program (Worksheets from pages 25-53, completed during step 2 of Implementation Planning). These sheets can now be used to guide the implementation effort.

FIGURE 9
BLOCK 3
IMPLEMENTATION PROGRAM



IMPLEMENTATION PROGRAM ORIENTATION
STAGE 1



The Orientation Stage begins when a product reaches the production and deployment phase in the Army's Life Cycle System Management Model (LCSMM). At this point receiving units need to be informed about the new product which is coming. Orientation has three phases shown in Figure 10:

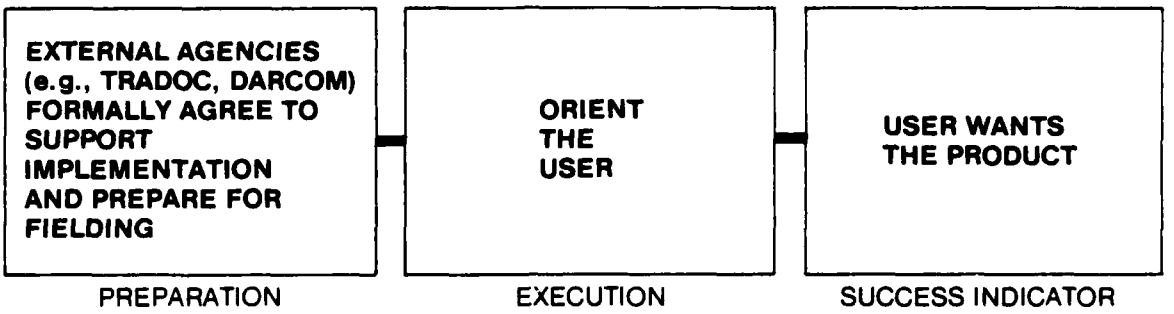
- **PREPARATION: External Agencies Formally Agree to Support Implementation and Prepare for Fielding.** The appropriate agencies need to develop a basis of issue plan, delivery schedules for the product and an implementation support plan. Then all the external agencies involved in implementation need to agree to the schedules and implementation plan.

- **EXECUTION: Orient the User.** Successful orientation communicates the product's expected utility, informs users about the product's overhead and skill requirements, provides technical and financial aid (if necessary) to prepare user for the product and coordinates the user's implementation preparations.

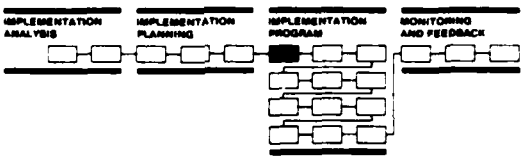
- **SUCCESS INDICATOR: User Wants the Product.** A user has been successfully oriented when key individuals in the chain of command understand and want the product and when the user organization has developed a utilization plan.

Because lead time is always a scarce commodity, Orientation is frequently overlooked or only partially done. Orientation is a real opportunity to get a jump on implementation and reduce a lot of misunderstanding and problems later on.

FIGURE 10
ORIENTATION
STAGE 1



ORIENTATION
STAGE 1
PREPARATION PHASE



EXTERNAL AGENCIES (e.g., TRADOC, DARCOM) FORMALLY AGREE TO SUPPORT IMPLEMENTATION AND PREPARE FOR FIELDING.

EXTERNAL AGENCIES FORMALLY AGREE TO FIELDING AND IMPLEMENTATION SUPPORT PLANS

APPROPRIATE AGENCIES DEVELOP BASIS OF ISSUE PLAN, DELIVERY SCHEDULES AND IMPLEMENTATION SUPPORT PLAN

Before users can be alerted that a product is on its way *external agencies must agree to support implementation and prepare for fielding.* Orientation will be much more successful if developers ensure that the following steps are taken *before* contacting the users:

- **EXTERNAL AGENCIES FORMALLY AGREE TO FIELDING AND IMPLEMENTATION SUPPORT PLANS.** Agencies involved in implementation (e.g., TRADOC, DARCOM, Operational MACOMs) should agree up-front on everyone's role throughout the implementation program. Frequently agreements between external support agencies do not extend beyond fielding the product, and long-term support is overlooked. It is harder to get people to commit additional support for a product after it reaches the field. Formal agreements also provide institutional memory that will help the implementation program weather personnel turbulance within the agencies involved in implementing and supporting the product.

- **APPROPRIATE AGENCIES DEVELOP A BASIS OF ISSUE PLAN, DELIVERY SCHEDULES AND AN IMPLEMENTATION SUPPORT PLAN.** Users can begin their planning when they have a realistic delivery date and have some idea what the implementation program is going to look like. This information should be available to the user in time to make necessary arrangements, but should not arrive so early that no action is required for weeks or months.

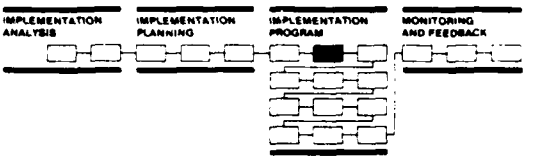
The information which you developed for the worksheet shown in Figure 11 can be used to guide this phase of Orientation.

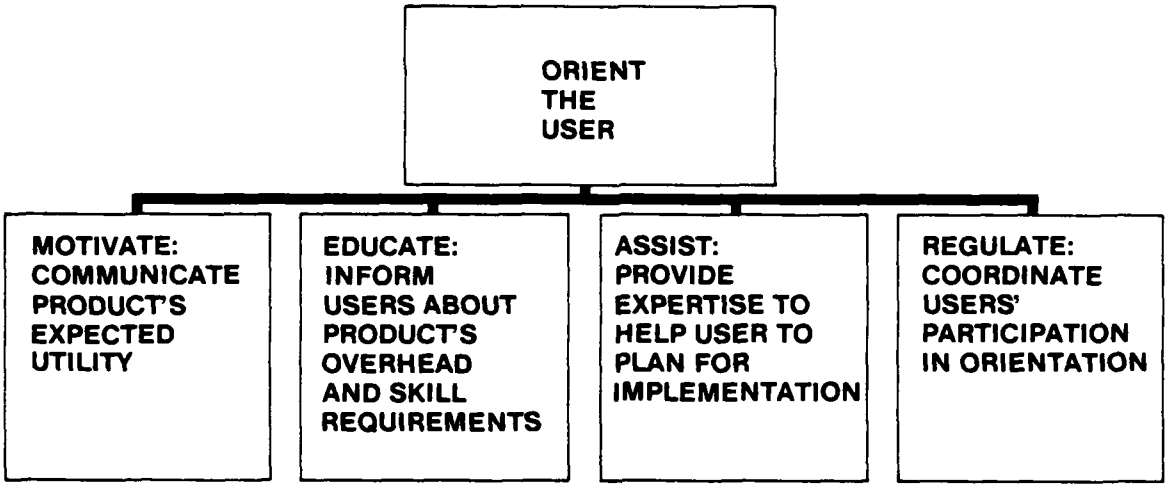
FIGURE 11
WORKSHEET FOR PLANNING AND GUIDING PREPARATION PHASE
STAGE 1: ORIENTATION

EXTERNAL AGENCIES (e.g., TRADOC, DARCOM) FORMALLY AGREE TO SUPPORT IMPLEMENTATION AND PREPARE FOR FIELDING

External agencies formally agree to fielding and implementation support plans	**Appropriate agencies develop basis of issue plan, delivery schedules and implementation support plans**
TRADOC Agencies:	
DARCOM/ARRCOM Agencies:	
User MACOM Agencies:	
Field Users:	

ORIENTATION
STAGE 1
EXECUTION PHASE





The orientation effort gets the user ready for the product. Each involved agency (e.g., TRADOC, DARCOM, ARRCOM) will have different messages to communicate such as training concepts, material fielding plans or implementation support agreements. Whatever your message you need to:

- **MOTIVATE: Communicate product's expected utility to users.** Commanders and other key individuals must want to receive the product. This can be accomplished through such vehicles as demonstrations, command briefings, video-tapes and pamphlets.

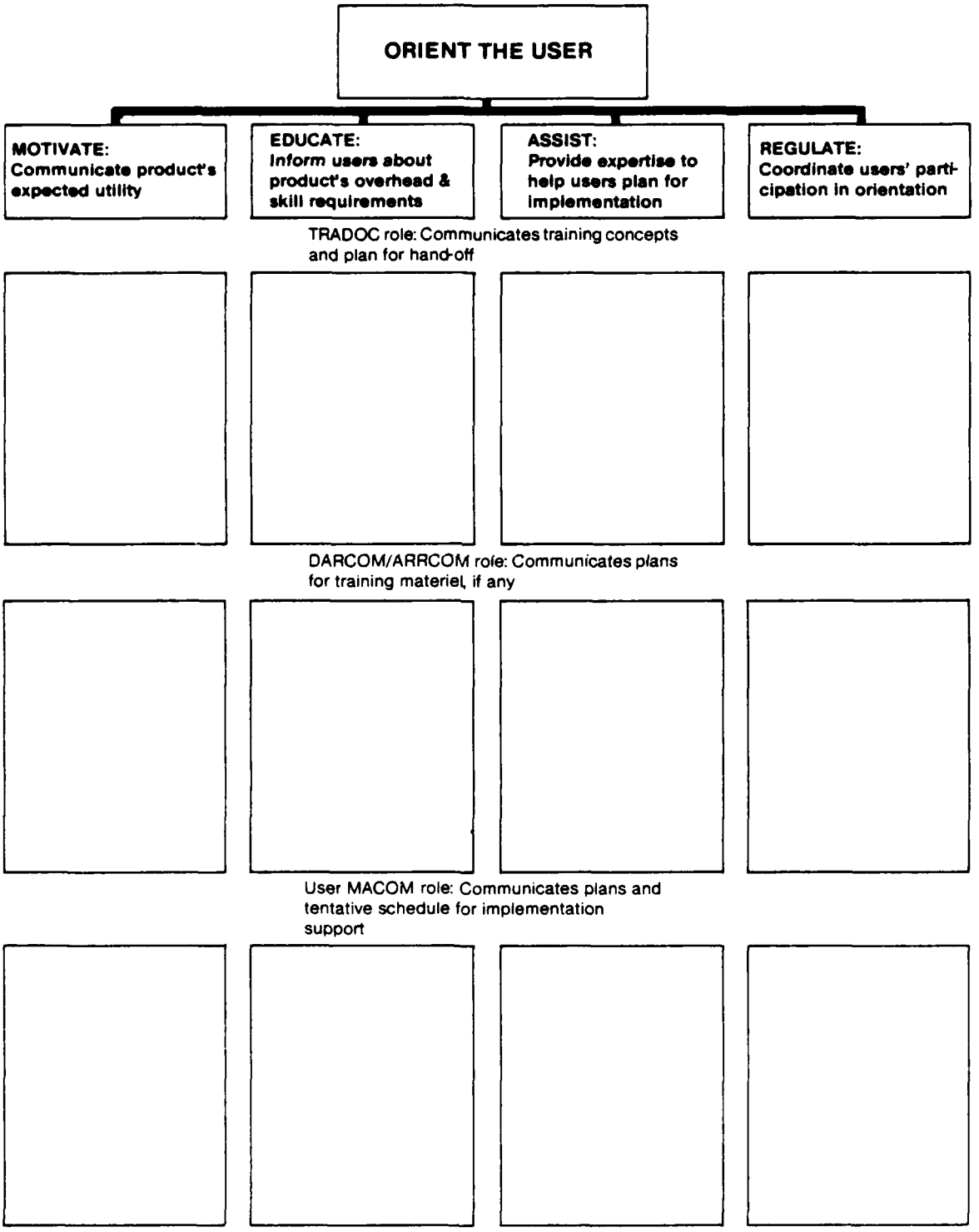
- **EDUCATE: Inform users about product's overhead and skill requirements.** Depending on the product, this education may require briefings, conferences, "look-ahead" letters, phone calls, etc.

- **ASSIST: Provide expertise to help user plan for implementation.** Send documentation or product experts to assist users in identifying and analyzing the product's requirements and developing local implementation plans.

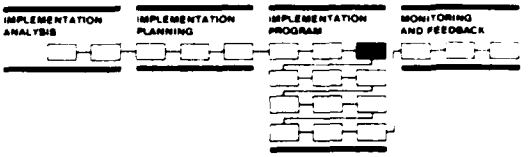
- **REGULATE: Coordinate users' participation in orientation.** Establish knowledgeable points of contact, and check to see that your orientation information is being widely disseminated. Ensure that user commands direct attendance of appropriate personnel at orientation meetings and product demonstrations.

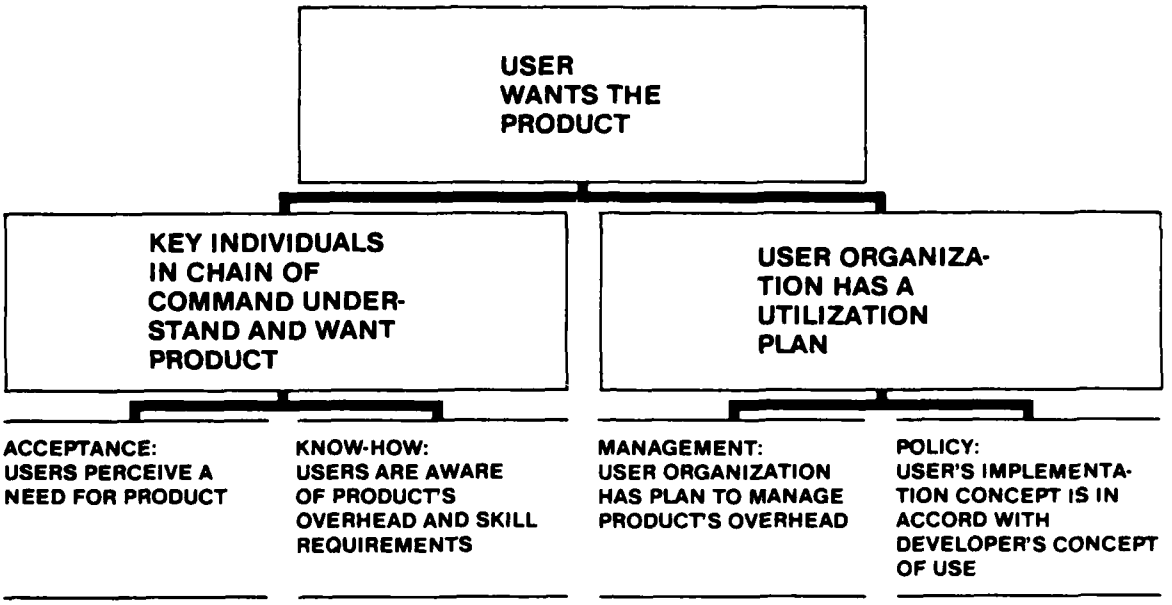
Information which you developed for the worksheet shown in Figure 12 can be used to guide the execution phase of Orientation.

FIGURE 12
WORKSHEET FOR PLANNING AND GUIDING EXECUTION PHASE
STAGE 1: ORIENTATION



ORIENTATION
STAGE 1:
SUCCESS INDICATOR PHASE





Orientation is successful if the user wants the product. Success is indicated when *key individuals in the chain of command understand and want the product* and *when the user organization has a utilization plan.*

KEY INDIVIDUALS are successfully oriented when they:

- PERCEIVE A NEED FOR THE PRODUCT
- ARE AWARE OF THE PRODUCT'S OVER-HEAD AND SKILL REQUIREMENTS

The **USER ORGANIZATION** is oriented when it:

- HAS A PLAN TO MANAGE THE PRODUCT'S OVERHEAD
- HAS AN IMPLEMENTATION CONCEPT IN ACCORD WITH THE DEVELOPER'S CONCEPT OF USE

If the above conditions are met, the user is ready to receive the product. *This readiness is perishable and will degrade quickly if there are too many delays between orientation and fielding.*

Information which you developed for the worksheet shown in Figure 13 establishes criteria for successful orientation.

FIGURE 13
WORKSHEET FOR ESTABLISHING SUCCESS INDICATORS
STAGE 1: ORIENTATION

USER WANTS THE PRODUCT

ACCEPTANCE:
Users perceive a need for product

- Training managers:
- Trainers:
- Trainees:

KNOW-HOW:
Users are aware of product's overhead and skill requirements

- Training managers:
- Trainers:
- Maintenance personnel:

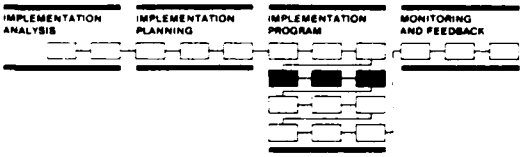
MANAGEMENT:
Users Organization has plan to manage product's overhead

- For supporting use:
- For controlling and maintaining:

POLICY:
Users implementation concept is in accord with developer's concept of use

- Utilization concept:
- Enforcement concept:

FIELDING
STAGE 2



The Fielding stage includes all the efforts to deliver equipment, documentation, training and logistic support. As was the case for Orientation, Fielding has three phases as is shown in Figure 14.

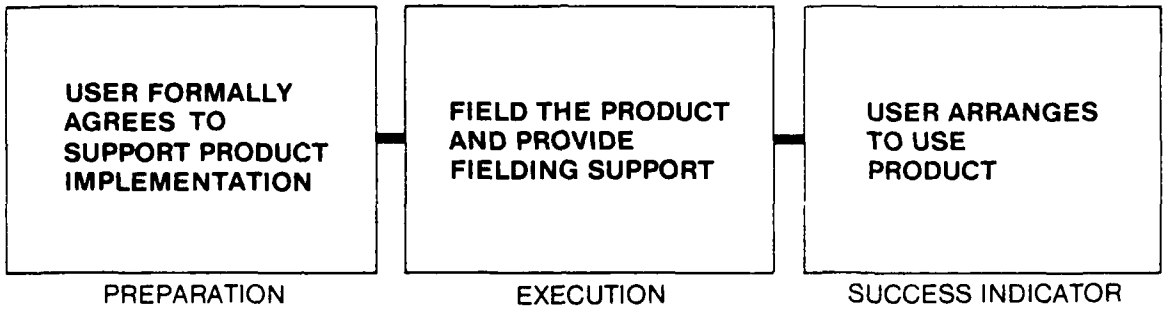
- **PREPARATION: User formally agrees to support product implementation.** In this phase agreements and plans developed during Orientation are formalized. The user signs fielding agreements and memoranda of understanding regarding external implementation support. The user prepares facilities and personnel as necessary to receive the product.

- **EXECUTION: Field the product and provide fielding support.** In addition to delivering any hardware or software, a successful fielding program publicizes demonstrations of the product's utility, (e.g., Operational Test (OT) results), teaches users how to use the product, supports fielding with outside resources, and reviews local implementation plans.

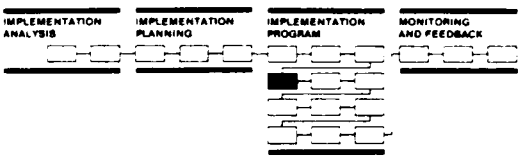
- **SUCCESS INDICATOR: User arranges to use the product.** A product has been successfully fielded when the user intends to use the product and has learned how to use it, and when the user organization has assigned roles and resources for initial use and has established implementation schedules.

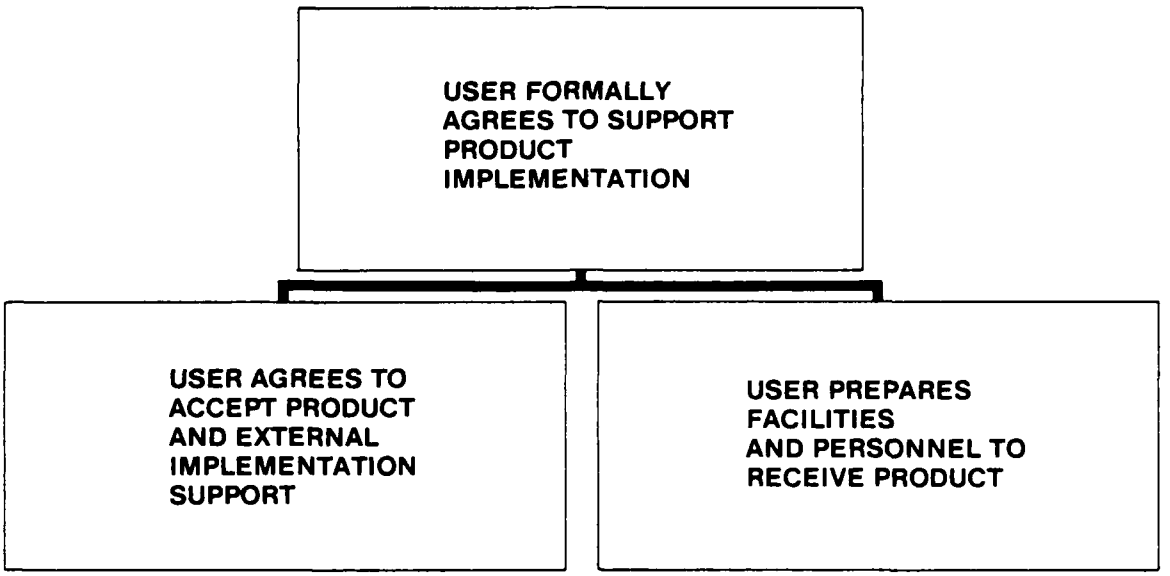
Fielding is more than product delivery. Successful implementation requires that every effort be made to see that receipt and early use of the product puts no unnecessary burden on the user.

FIGURE 14
FIELDING
STAGE 2



FIELDING
STAGE 2
PREPARATION PHASE





The fielding (and later implementation) efforts will be more successful if the user formally agrees to support product implementation in advance of actual fielding.

- **USER AGREES TO ACCEPT THE PRODUCT AND THE EXTERNAL IMPLEMENTATION SUPPORT.** Users make a formal commitment to provide the resources necessary to receive the product and participate in the implementation program. Without formal negotiation and agreement in advance of delivery, you may discover too late that users have plans for the product which differ greatly from yours or that the pressures of the moment make the users want to cut back on the support that is needed to carry out the implementation program.

- **USER PREPARES FACILITIES AND PERSONNEL TO RECEIVE PRODUCT.** Any special preparation of storage or classroom facilities, equipment or personnel should be arranged and checked on in advance of fielding.

Getting user agreements to support product implementation can reduce many headaches in the field. It is similar to making reservations in advance, so there are no surprises for either the user or the fielding team.

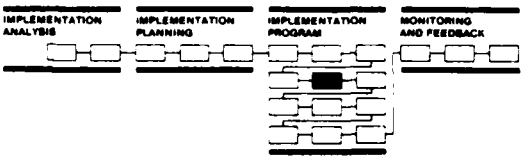
The information which you developed for the worksheet shown in Figure 15 can be used to guide this phase of Fielding.

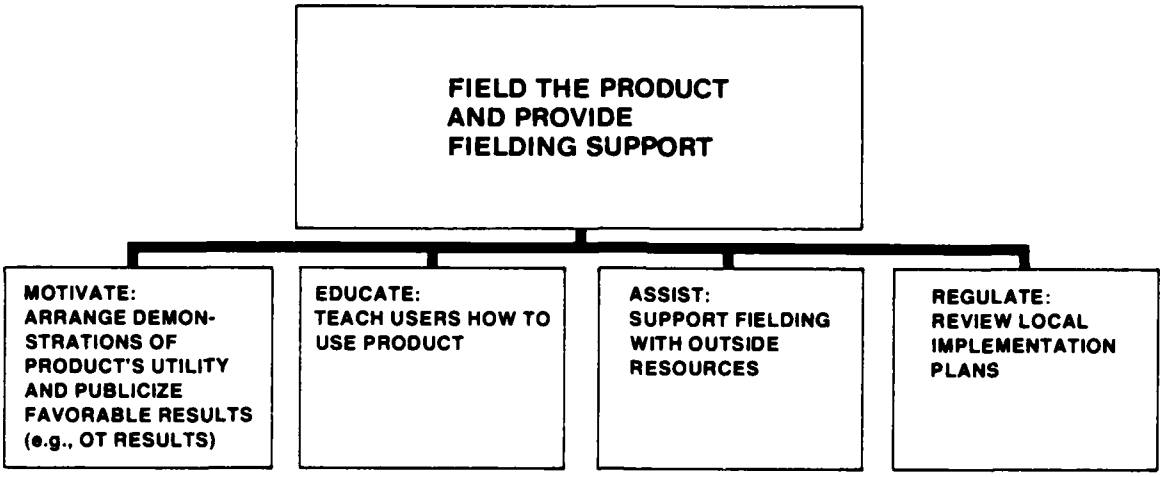
FIGURE 15
WORKSHEET FOR PLANNING AND GUIDING PREPARATION PHASE
STAGE 2: FIELDING

USER FORMALLY AGREES TO SUPPORT PRODUCT IMPLEMENTATION

User agrees to accept product and external implementation support	**User prepares facilities and personnel to receive product**
With TRADOC Agencies:	
With DARCOM/ARRCOM Agencies:	
With User MACOM Agencies:	

FIELDING
STAGE 2
EXECUTION PHASE





The fielding effort gets the user set to use the product. In addition to product delivery, TRADOC may hand-off a complete training support package, DARCOM may provide new equipment training and equipment assistance, and User MACOM's may be involved in coordinating and monitoring implementation.

- **MOTIVATE: Arrange demonstrations of product utility and publicize favorable results.** Show users what the product can do for them so that they will become motivated to use the product themselves.

- **EDUCATE: Teach users how to use product.** Through Mobile Training Teams, workshops or assisted on-the-job-training, ensure that personnel have mastered the skills and required knowledge to enable proper use of the product.

- **ASSIST: Support fielding with outside resources.** Provide technical and logistic support and training assistance to help the user receive the product and make arrangements for using it.

- **REGULATE: Review local implementation plans.** Make sure that the receiving unit has published directives which assign roles and resources for initial use of the product and establish schedule for use.

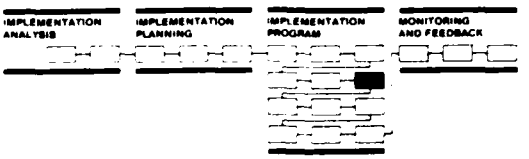
The information which you develop for the worksheet shown in Figure 16 can be used to guide the execution phase of Fielding.

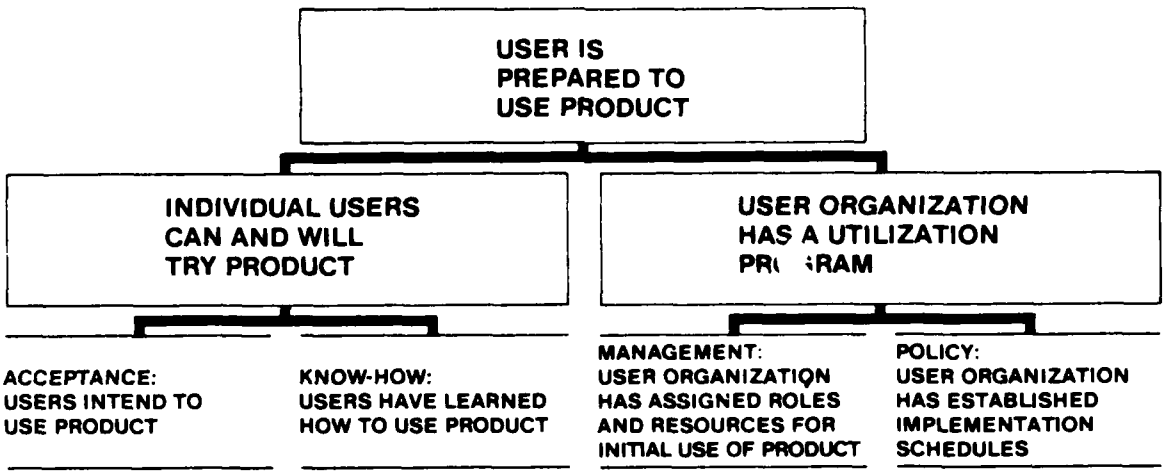
FIGURE 16
WORKSHEET FOR PLANNING AND GUIDING THE EXECUTION PHASE
STAGE 2: FIELDING

FIELD THE PRODUCT AND PROVIDE FIELDING SUPPORT

MOTIVATE: Arrange demonstrations of product's utility and publicize favorable results (e.g. OT or validation test results)	**EDUCATE: Teach users how to use product**	**ASSIST: Support fielding with outside resources**	**REGULATE: Review local implementation plans**
TRADOC role:			
DARCOM/ARRCOM role:			
User MACOM role:			

FIELDING
STAGE 2
SUCCESS INDICATOR PHASE





Fielding is successful when *the user is prepared to use the product.* Success is indicated if individuals user can and will try the product and when the user organization has a utilization program.

Individual users are successfully oriented when they:

- INTEND TO USE THE PRODUCT
- HAVE LEARNED HOW TO USE THE PRODUCT

The **user organization** is successfully oriented when it:

- HAS ASSIGNED ROLES AND RESOURCES FOR INITIAL USE OF PRODUCT
- HAS ESTABLISHED IMPLEMENTATION SCHEDULES

Successful fielding means more than delivering the product; it means preparing personnel and units to continue using the product on their own, without the extra support that often accompanies fielding efforts.

The information which you developed for the work sheet shown is Figure 17 establishes the criteria for success in the fielding stage.

FIGURE 17
WORKSHEET FOR ESTABLISHING SUCCESS INDICATORS
STAGE 2: FIELDING

USER IS PREPARED TO USE PRODUCT

ACCEPTANCE:
Users intend to use product

1. Training managers:

2. Trainers:

KNOW-HOW:
Users have learned how to use product

1. Training managers:

2. Trainers:

3. Trainees:

MANAGEMENT:
User organization has assigned roles and resources for initial use of product

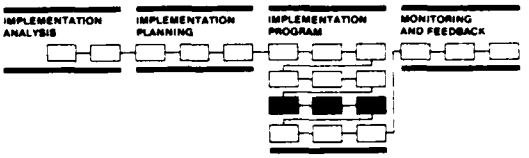
1. To use:

2. To control and maintain:

POLICY:
User organization has established implementation schedules

1. Use product:

2. Evaluate product:



TRIAL
STAGE 3

The Trial Stage begins when users start using the product on their own. The stage ends when the users have dealt with all the start-up problems and have decided to institutionalize use of the product or to discontinue use. Trial has three phases as is shown in Figure 18.

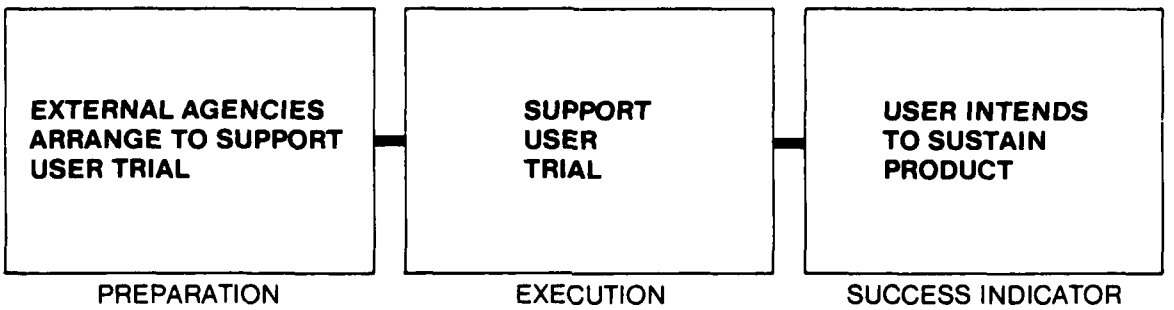
- **PREPARATION: External agencies arrange to support user trial.** If external support must be continued past fielding, appropriate agencies must prepare materials, programs, and procedures to support user trial. Appropriate agencies must also develop product evaluation plans to track product utilization and effectiveness.

- **EXECUTION: Support user trial.** A successful trial effort solicits and publicizes product success stories, obtains and communicates lessons-learned about using the product and provides resources and technical assistance to support initial use of the product. Evaluation teams will also monitor use and evaluate effectiveness of the product during the trial stage.

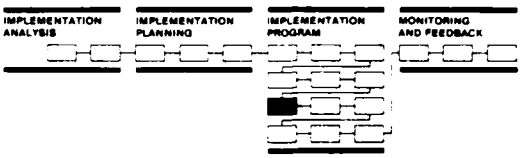
- **SUCCESS INDICATOR: User intends to sustain the product.** A product has had a successful trial when individual users are satisfied with the product and when the user organization has developed a sustainment program.

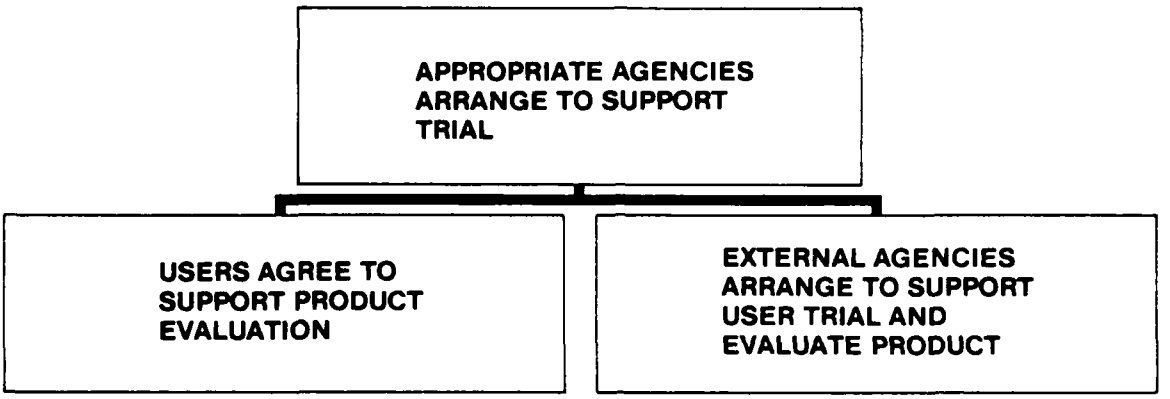
Most product die in the trial stage if they are going to die at all. Users either never begin using the product or are overwhelmed with start-up problems for which they lack the personnel, time or resources to solve.

FIGURE 18
TRIAL
STAGE 3



TRIAL
STAGE 3
PREPARATION PHASE





Most products succeed or fail in the Trial Stage. Products always cause more problems than anyone expects (that's Murphy's Law), and users may simply give up on a product when they encounter those unexpected problems. To forestall that possibility, all appropriate agencies should be prepared to take steps to ensure that the product gets a fair trial in the user environment.

- **USERS AGREE TO SUPPORT PRODUCT EVALUATION.** Users should be prepared to provide feedback on problems as well as successes they are having during early use of the product. This feedback will help external agencies to adjust implementation support as necessary and will provide input to the user's own decisions about sustaining or discounting use of the product.

- **EXTERNAL AGENCIES ARRANGE TO SUPPORT USER TRIAL AND EVALUATE PRODUCT.** In order to make timely delivery of implementation support, external agencies must prepare materials and assistance programs well in advance of the time they are needed in the user environment. In addition, plans must be developed for obtaining data from the user to evaluate the product and contribute to decisions about life-cycle support.

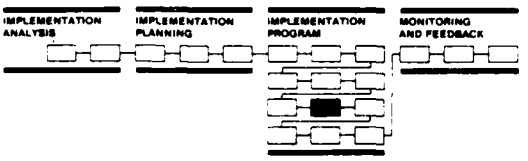
This information which you developed for the worksheet shown in Figure 19 can be used to guide this phase of the Trial Stage.

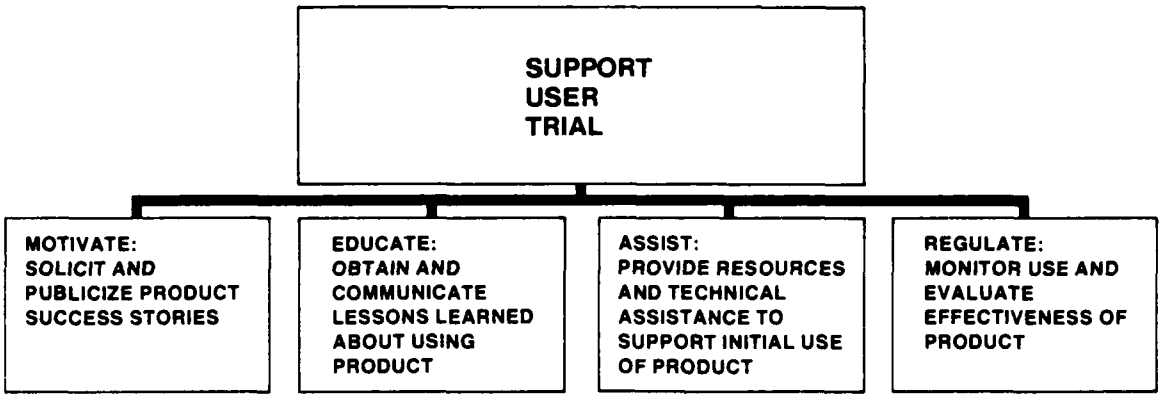
FIGURE 19
WORKSHEET FOR PLANNING AND GUIDING PREPARATION PHASE
STAGE 3: TRIAL

APPROPRIATE AGENCIES ARRANGE TO SUPPORT USER TRIAL

USERS AGREE TO SUPPORT PRODUCT EVALUATION	**EXTERNAL AGENCIES ARRANGE TO SUPPORT USER TRIAL AND EVALUATE PRODUCT**
TRADOC Agencies:	
DARCOM/ARRCOM Agencies:	
User MACOM Agencies:	
Field Users:	

TRIAL
STAGE 3
EXECUTION PHASE





The effort to support user trials is intended to ensure that use of the product is a go in the operational environment. The major complaint of receiving units is that products get dumped on them. Developers arrive with much fanfare, field a product and disappear, leaving the user alone to solve all the start-up problems. To counter these problems and to prepare the user to sustain the product, provide support to user trial.

- **MOTIVATE: Solicit and publicize any product success stories.** Tell people when their peers are getting better ratings, using less resources or getting more training done by using the product.

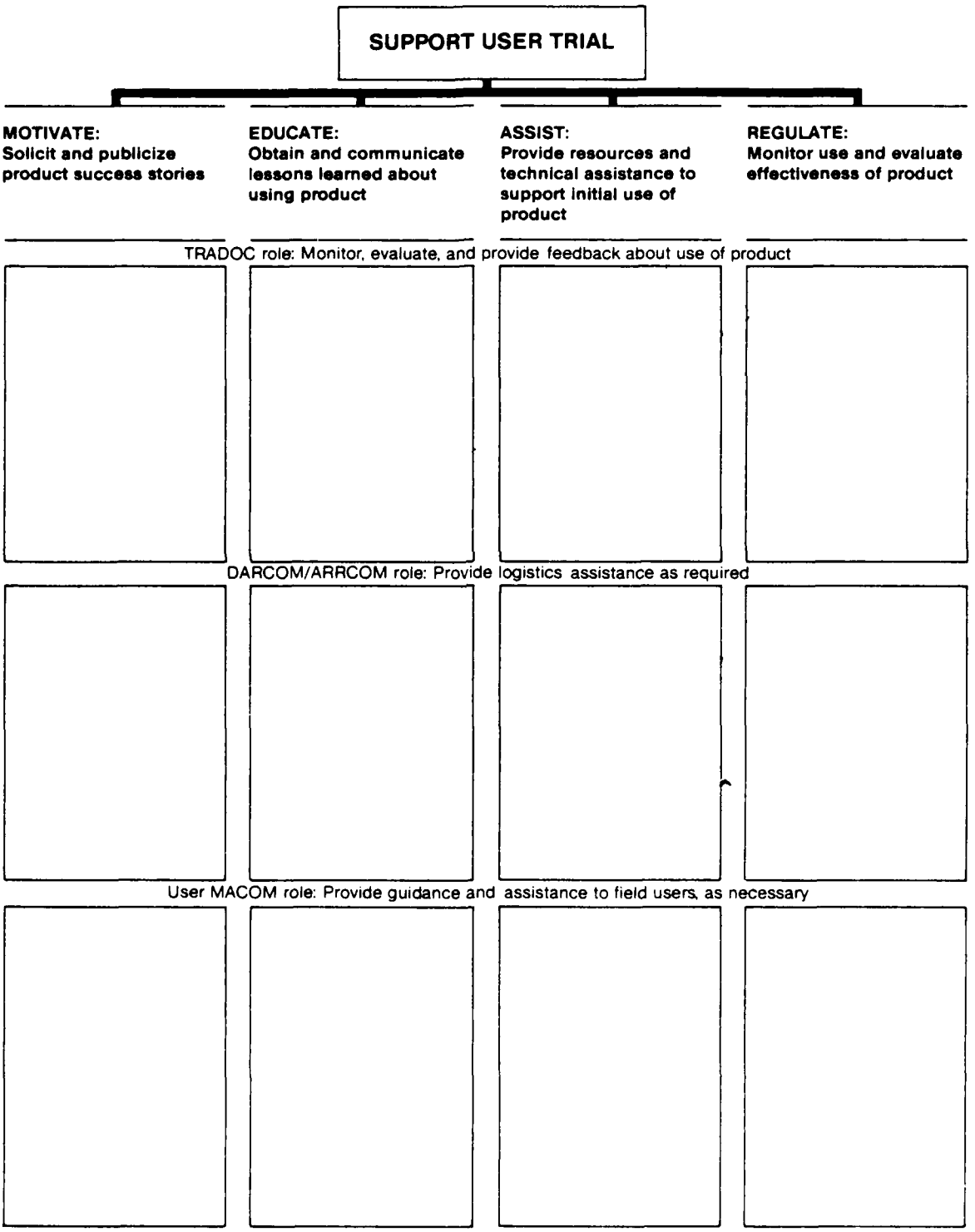
- **EDUCATE: Obtain and communicate lessons learned about using product.** Circulate commanders' comments, user's guides, etc. so that all users benefit from the experiences others are having with the product.

- **ASSIST: Provide resources and technical assistance to support initial use of product.** This assistance will help users to solve start-up problems. Depending on the product, this could be ammunition, technical experts, contract maintenance, etc., but do not over commit yourself or raise false expectations among users.

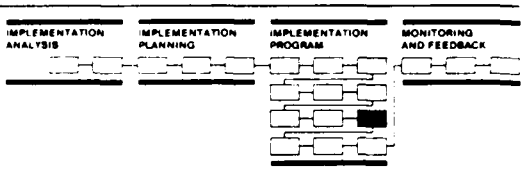
- **REGULATE: Monitor use and evaluate effectiveness of product.** Ensure that the user command and the external evaluation agencies are directed to report data concerning product use. The data should represent frequency and quality of use, resources consumed, and training effectiveness.

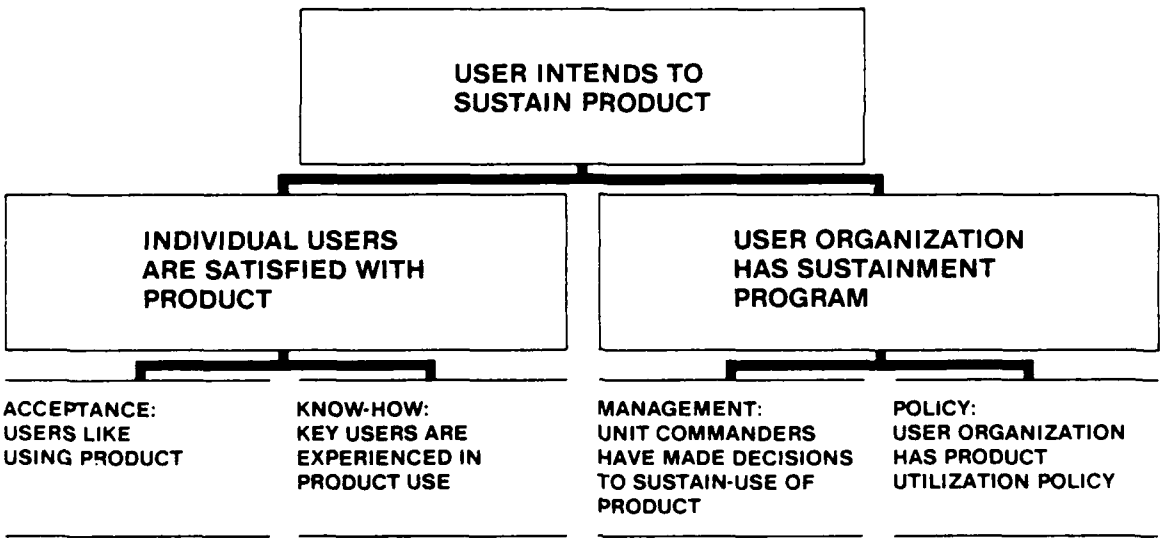
The information which you developed for the worksheet shown in Figure 20 can be used to guide the Execution phase of the Trial Stage.

FIGURE 20
WORKSHEET FOR PLANNING AND GUIDING THE EXECUTION PHASE
STAGE 3: TRIAL



TRIAL
STAGE 3
SUCCESS INDICATOR PHASE





Trial is a success if the user intends to sustain the product. Success is indicated if individuals are satisfied with the product and when the user organization has a sustainment program.

Individual users have had a successful trial if they:

- LIKE THE PRODUCT
- ARE EXPERIENCED IN PRODUCT USE

The **user organization** has given the product a successful trial if:

- UNIT COMMANDERS HAVE MADE DECISIONS TO SUSTAIN THE USE OF THE PRODUCT
- THE USER ORGANIZATION HAS A PRODUCT UTILIZATION POLICY

By carrying the implementation program through initial user trials, you can help ensure that your product will not be one of those which end up on storage shelves because it proves too difficult or troublesome to use.

The information which you developed for the worksheet shown in Figure 21 establishes criteria for success during the Trial Stage.

FIGURE 21
WORKSHEET FOR ESTABLISHING SUCCESS INDICATORS
STAGE 3: TRIAL

USER INTENDS TO SUSTAIN PRODUCT

ACCEPTANCE:
Users like using the product

1. Training managers:

2. Trainers:

3. Trainees:

KNOW-HOW:
Key users are experienced in product use

1. Training managers:

2. Trainers:

3. Trainees:

MANAGEMENT:
Unit commanders have made decisions to sustain use of product

1. Administrative and logistic levels:

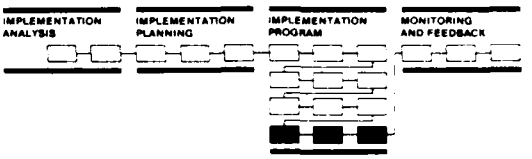
2. Operational user level:

POLICY:
User organization has product utilization policy

1. To use:

2. To monitor use:

INTEGRATION
STAGE 4



The Integration stage begins when users decide to make sustained use of the product. Integration has three phases as is shown in Figure 22.

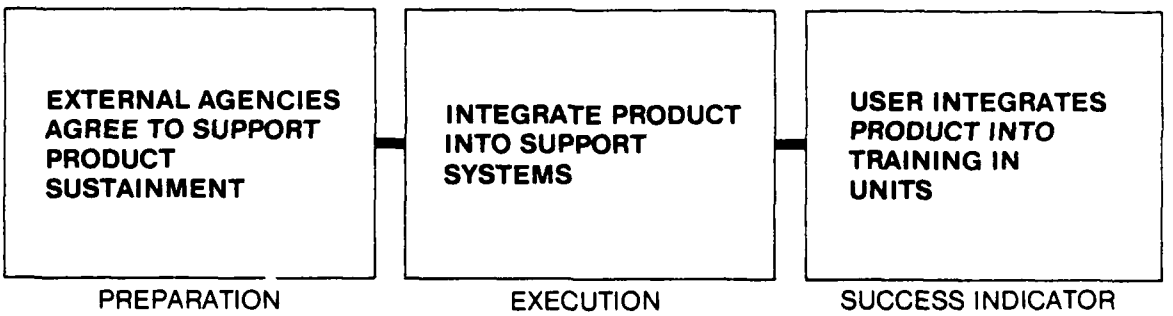
- **PREPARATION: External support agencies agree to support product sustainment.** If the product is to become a permanent part of training in units, external support, agencies need to agree to integrate the product into training and maintenance literature, the schools, procurement programs, etc.

- **EXECUTION: Integrate the product into external support systems.** A successful integration effort will include product information in all relevant training and maintenance literature, integrate the product into TRADOC-conducted resident training and integrate product support into routine procedures for supporting operational units.

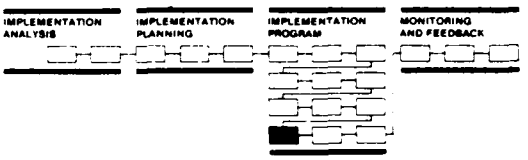
- **SUCCESS INDICATOR: User integrates product into training in units.** A product is successfully integrated when individuals and or units make routine use of the product, and when the user organizations integrate the product into routine training practices.

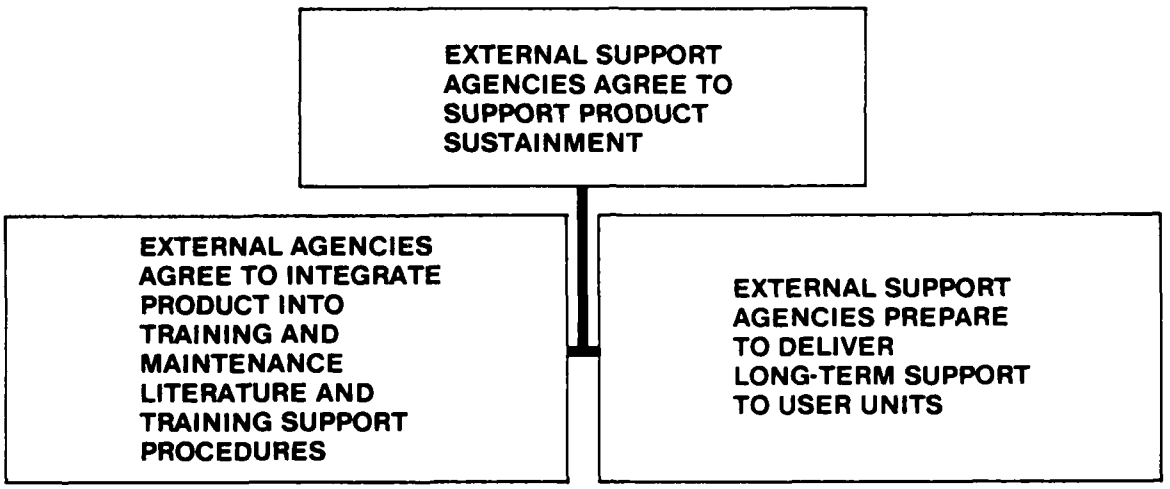
The integration of the product into training continues with product modifications, updates in support, documentation, etc. throughout the life-cycle.

FIGURE 22
INTEGRATION
STAGE 4



INTEGRATION
STAGE 4
PREPARATION PHASE





Even after a successful trial, a new product may cease to be used if its use is in conflict with other elements of the training system and the training support system of the Army. These conflicts will be minimized when *external support agencies make formal agreements to support product sustainment.*

- **EXTERNAL AGENCIES AGREE TO INTEGRATE PRODUCT INTO TRAINING AND MAINTENANCE LITERATURE AND TRAINING SUPPORT PROCEDURES.** A product may be overlooked or neglected unless people can quickly and easily find out how to use, maintain and support it. Integrating the product into the literature insures that use and sustainment guidance is widely known and easily accessible.

- **EXTERNAL SUPPORT AGENCIES PREPARE TO DELIVERY LONG-TERM SUPPORT TO USER UNITS.** If units cannot support a product given their available resources, they must have some help. This assistance should be programmed as soon as user trials have indicated what long-term support is required.

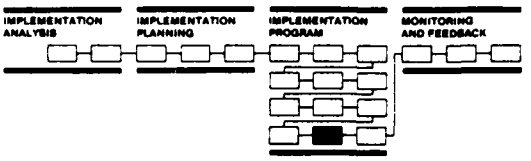
The information which you developed for the worksheet shown in Figure 23 can be used to guide this phase of the Integration Stage.

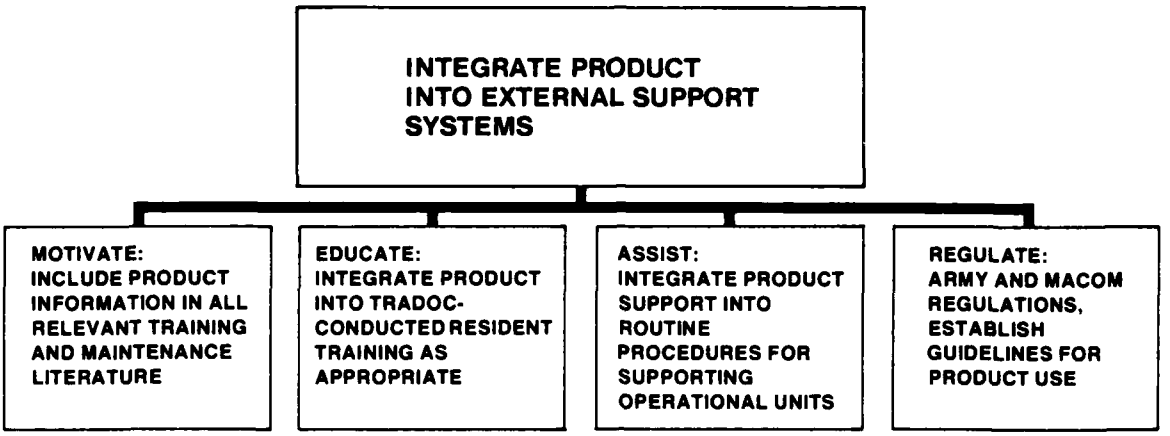
FIGURE 23
WORKSHEET FOR PLANNING AND GUIDING THE PREPARATION PHASE
STAGE 4: INTEGRATION

EXTERNAL SUPPORT AGENCIES AGREE TO SUPPORT PRODUCT SUSTAINMENT

External support agencies agree to integrate product into training and maintenance literature, and training support procedures	**External support agencies prepare to deliver long-term support to user units**
TRADOC Agencies:	
DARCOM/ARRCOM Agencies:	
User MACOM Agencies:	

INTEGRATION
STAGE 4
EXECUTION STAGE





If the product is to become a standard part of US Army training then it must be integrated into the support systems of agencies external to operational units (TRADOC, ARRCOM, operational MACOMs). Otherwise product use may wither away for lack of resources or incentive.

- **MOTIVATE: Include product information in all relevant training and maintenance literature.** If soldiers and leaders are constantly confronted with information about the product, they will come to see it as *the* way to train.

- **EDUCATE: Integrate product into TRADOC-conducted resident training as appropriate.** Ensure that trainers and trainees go to their units prepared to use the product and, when appropriate, provide refresher training in units.

- **ASSIST: Integrate product support into routine procedures for supporting operational units.** Ensure that amounts of ammunition, supplies and spare parts required by the product are procured and made available to units on a routine basis.

- **REGULATE: Army and MACOM regulations establish guidelines for product use.** Formal inspection procedures should include checks on product usage.

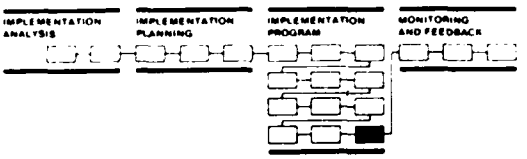
The information which you developed for the worksheet shown in Figure 24 can be used to guide the Execution Phase of the Integration Stage.

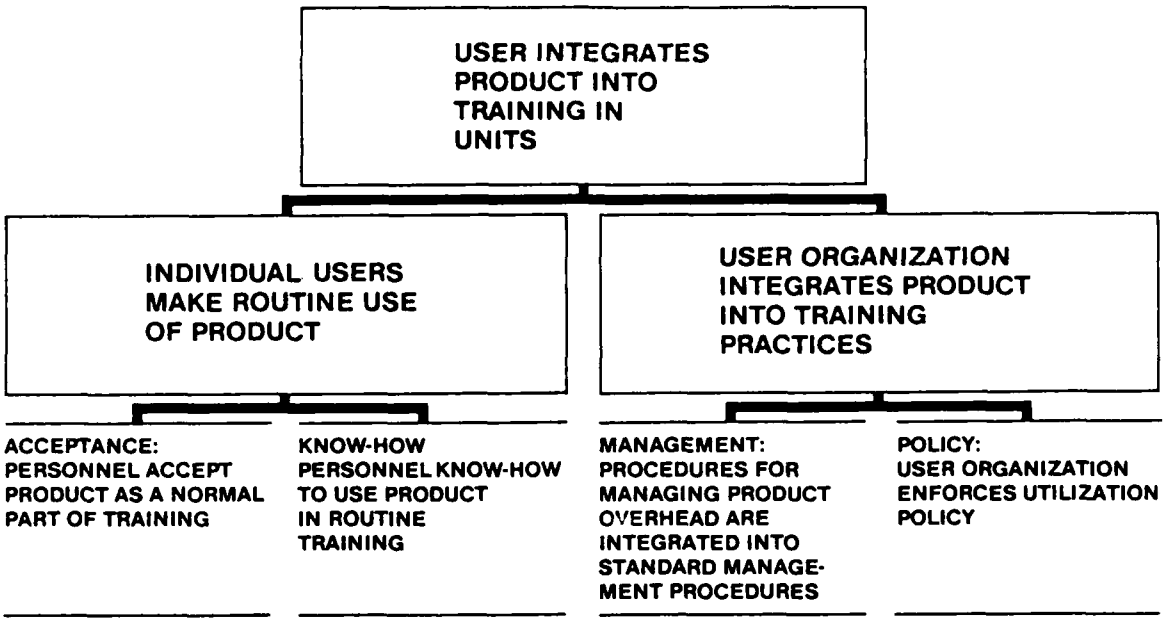
FIGURE 24
WORKSHEET FOR PLANNING AND GUIDING THE EXECUTION PHASE
STAGE 4: INTEGRATION

INTEGRATE PRODUCT INTO EXTERNAL SUPPORT SYSTEMS

MOTIVATE: Include product information in all relevant training and maintenance literature	**EDUCATE:** Integrate product into TRADOC-conducted resident training as appropriate	**ASSIST:** Integrate product support into routine procedures for supporting operational units	**REGULATE:** Army and MACOM regulations establish guidelines for product use
TRADOC role: Integrate product into training support mission			
DARCOM, ARRCOM role: Integrate product into logistic support and acquisition systems			
User MACOM role: Integrate product into fiscal and operational support systems			
DA role: Integrate product into training policies and regulations			

INTEGRATION
STAGE 4:
SUCCESS INDICATOR PHASE





Integration of the product into Army training is successful when *Individuals make routine use of the product and when the user organization integrates the product in training practices.*

Individual Users have successfully integrated the product into training when they:

- *ACCEPT* PRODUCT AS A NORMAL PART OF TRAINING
- HAVE THE *KNOW-HOW* TO USE THE PRODUCT IN ROUTINE TRAINING

The **User Organization** has successfully integrated the product into training when:

- PROCEDURES FOR *MANAGING* PRODUCT OVERHEAD ARE INTEGRATED INTO STANDARD MANAGEMENT PROCEDURES
- IT ENFORCES ITS UTILIZATION *POLICY*

The indicators of success in Stage 4 (Integration) represent solution of implementation problems — Acceptance, Know-How, Management and Policy — diagnosed in Step 2 of the Implementation Analysis. These indicators, if monitored at intervals, will track long-term support needs and product improvement which result from the regular use of the product.

The information which you developed for the worksheet shown in Figure 25 establishes criteria for successful integration of the product into Army training procedures.

FIGURE 25
WORKSHEET FOR ESTABLISHING SUCCESS INDICATORS
STAGE 4: INTEGRATION

These indicators should represent the product being used as intended in the user environment.

USER INTEGRATES PRODUCT INTO TRAINING IN UNITS

ACCEPTANCE:
Personnel accept product as a normal part of training

1. Training managers:

2. Trainers:

3. Trainees:

KNOW-HOW:
Personnel know-how to use product in routine training

1. Informed training managers:

2. Prepared trainers:

3. Prepare trainees:

MANAGEMENT:
Procedures for managing product overhead are integrated into standard management procedures

1. To manage overhead for using product (e.g., consumables, time, ranges, etc.):

2. To manage overhead for controlling and maintaining product:

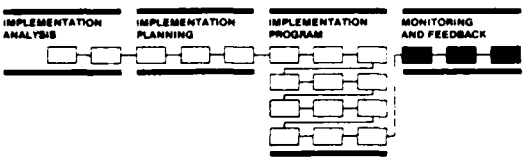
POLICY:
Utilization policy is enforced

1. Frequency of use prescribed:

2. Quality of use attained:

3. Frequency of inspection:

BLOCK 4
MONITORING AND FEEDBACK



The overview map shown at the top of this page has been used to track progress through this guide. It shows monitoring and feedback as occurring after everything has been done. The fact is, however, that monitoring and feedback occurs at each phase of every stage in the Implementation Program. The plan for monitoring and feedback was developed during Step 3 of Implementation Planning (Block 2). The steps described on the following pages of this guide are for collecting the feedback information during each phase of the Implementation Program (Block 3), diagnosing problems, deciding who should solve them, and then feeding relevant information back to appropriate action agencies.

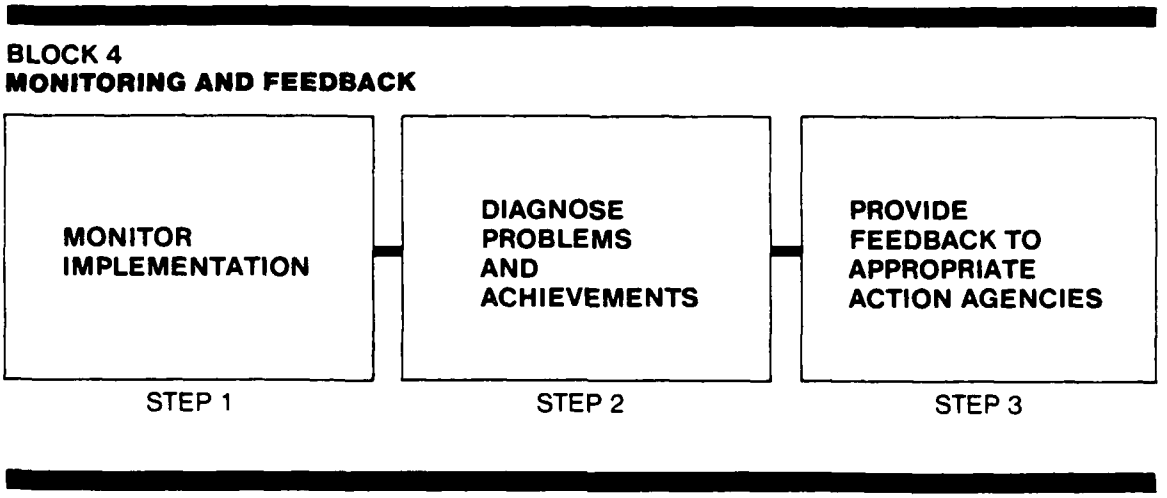
The purpose of Monitoring and Feedback is to see that things are being *done right* , that the *right things* are being done, and that the right *people* find out about it. There are three steps in monitoring and feedback as shown in Figure 26.

STEP 1: MONITOR IMPLEMENTATION. Collect data to describe the current status of the implementation program: preparation, execution and successes.

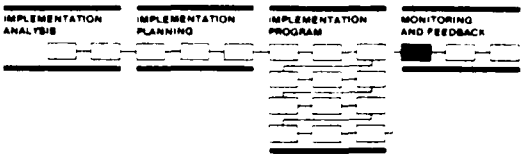
STEP 2: DIAGNOSE PROBLEMS AND ACHIEVEMENTS. Analyze the data collected in Step 1 to determine if the preparations were adequate, the program effectively executed, and success achieved at each stage of implementation.

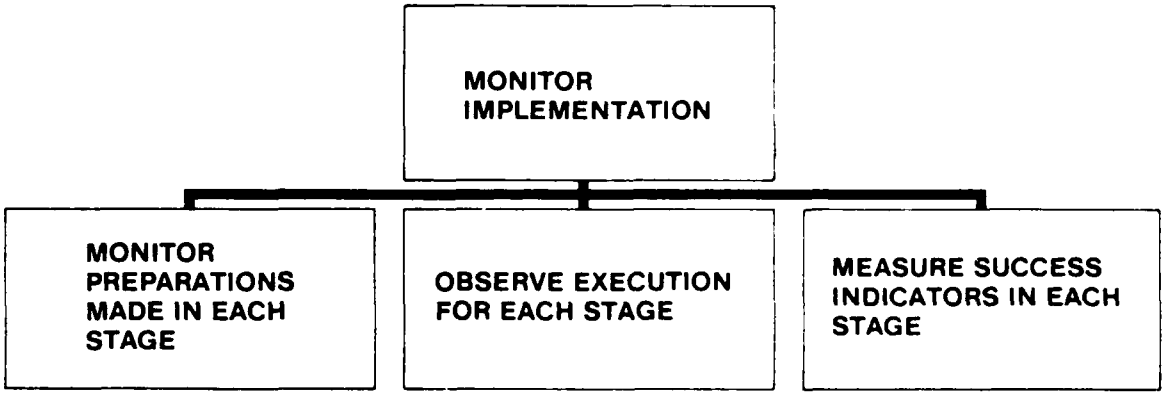
STEP 3: PROVIDE FEEDBACK TO APPROPRIATE ACTION AGENCIES. Information is fed back to facilitate negotiations and *decision making to improve* the product or its support, as necessary.

FIGURE 26
BLOCK 4
MONITORING AND FEEDBACK



MONITORING AND FEEDBACK
MONITOR IMPLEMENTATION
STEP 1





Monitor implementation in order to collect timely information about the Preparation, Execution and Success Indicators at each stage of the Implementation Program.

- **MONITOR PREPARATIONS MADE IN EACH STAGE:** Although you may not be able to observe the actions of other concerned agencies, you can keep in touch with the preparations through telephone calls, having yourself placed on agency information routing lists, and keeping in touch with points of contact on a scheduled basis.

- **OBSERVE EXECUTION FOR EACH STAGE:** To ensure that things are being done right, collect on-site information from a sample of units involved in implementation.

- **MEASURE SUCCESS INDICATORS IN EACH STAGE: The most important information comes from users.** Be certain to ask (either observe or survey individuals and unit leaders) if the implementation program is having the desired effect! If it is not possible to obtain information from every user unit, be sure to obtain information from a sample that is representative of the different kinds and locations of user units.

Next to the execution of implementation program, monitoring implementation is the most important action to take. You have to know what impact your program is having on users in order to determine what actions to take next.

Different products may require different kinds of data recording forms for collecting feedback. An example of a possible data recording form is shown in Figure 27. You'll need forms to record information about each phase of each stage.

FIGURE 27
AN EXAMPLE OF A POSSIBLE DATA COLLECTION FORM

Using the plan for the implementation program (Pg. 25 - 53), develop data *recording forms for each* phase of each stage

MONITOR IMPLEMENTATION

INTEGRATION STAGE
TRIAL STAGE
FIELDING STAGE
ORIENTATION STAGE

MONITOR PREPARATIONS

EEA	Current Status	Data Source
(list all items on worksheet shown on Pg. 25)		
1. Agreements and coordinations		
2. Plans and *materials*		

INTEGRATION STAGE
TRIAL STAGE
FIELDING STAGE
ORIENTATION STAGE

OBSERVE EXECUTION

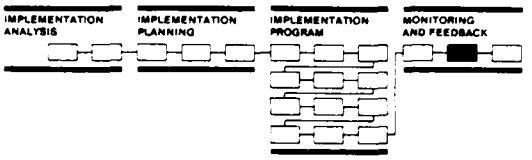
EEA	Current Status	Data Source
(list all items on worksheet shown on Pg.27)		
1. Motivate		
2. Educate		
3. Assist		
4. Regulate		

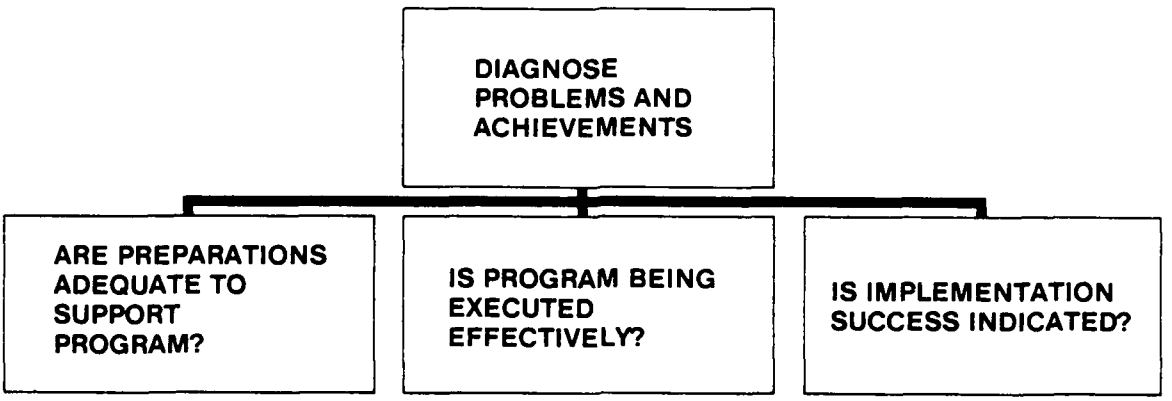
INTEGRATION STAGE
TRIAL STAGE
FIELDING STAGE
ORIENTATION STAGE

MEASURE SUCCESS INDICATORS

EEA	Current Status	Data Source
(list all items on worksheet shown on Pg. 29)		
1. Acceptance		
2. Know-how		
3. Management		
4. Policy		

MONITORING AND FEEDBACK
DIAGNOSE PROBLEMS AND ACHIEVEMENTS
STEP 2





This step in monitoring and feedback is designed to diagnose strengths and weaknesses in the implementation program. It requires the data obtained about EEA (which were developed during Step 3 of implementation planning; See Pg. 19) be analyzed and results quantified. Quantifying serves two purposes. First, it reduces results to the simplest possible terms. If, for example, you use a scale that ranges from 0-4 where 0 indicates "totally unsatisfactory" for a given element of the program and 4 indicates "totally satisfactory", then the current status on any particular element of the program can be easily translated into a need for action: 0 or 1 means "do something to improve the situation with respect to this element", 2 means "keep a careful eye on this element", and 3 or 4 means "no problem". The second advantage of quantifying is that results can be easily scanned to identify the *pattern* of implementation problem that is being encountered. For example, problems may cluster within a particular stage (e.g. everything was going great until "trial") or within a particular phase across stages (e.g. success is not indicated despite excellent execution of the program). Different patterns will require different kinds of corrective action. To complete Step 2 you will need a data analysis sheet for each stage of the implementation program. Figure 28 provides a possible format for data analysis sheets.

FIGURE 28
AN EXAMPLE OF A POSSIBLE FORMAT FOR DATA ANALYSIS SHEETS

DIAGNOSE PROBLEMS AND ACHIEVEMENTS

Using "current status" information (see Pg. 57), answer these questions

INTEGRATION STAGE
TRIAL STAGE
FIELDING STAGE
ORIENTATION STAGE

ARE PREPARATIONS ADEQUATE TO SUPPORT PROGRAM?

EEA	Completely adequate		Marginal		Completely inadequate
(list all EEA from appropriate data collection forms)	4	3	2	1	0
1. Agreements and coordinations					
2. Plans and material preparations					

INTEGRATION STAGE
TRIAL STAGE
FIELDING STAGE
ORIENTATION STAGE

IS PROGRAM BEING EXECUTED EFFECTIVELY?

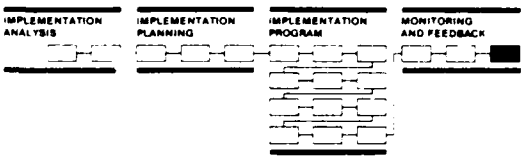
EEA	Completely effective		Marginal		Completely Ineffective
(list all EEA from appropriate data collection forms)	4	3	2	1	0
1. Motivate					
2. Educate					
3. Assist					
4. Regulate					

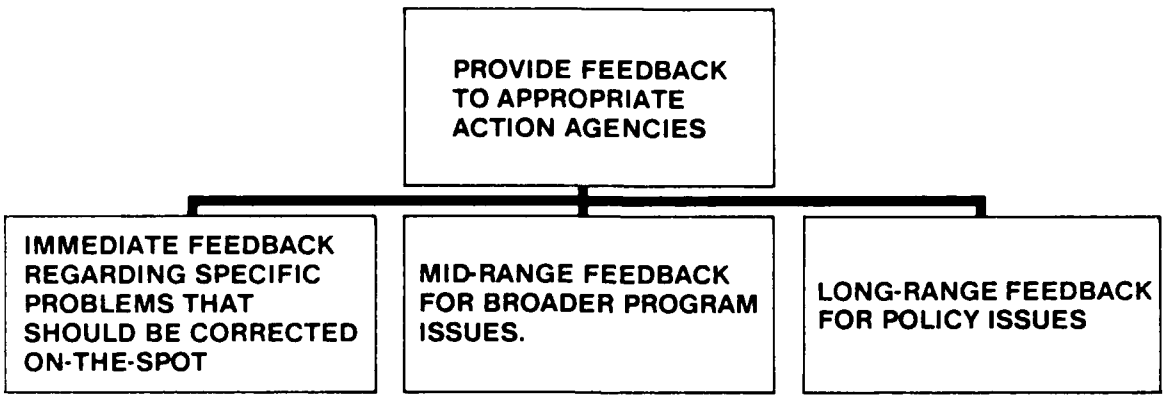
INTEGRATION STAGE
TRIAL STAGE
FIELDING STAGE
ORIENTATION STAGE

IS IMPLEMENTATION SUCCESS INDICATED?

EEA	Outstanding		Marginal		Failure
(list all EEA from appropriate data collection forms)	4	3	2	1	0
1. Acceptance					
2. Know-how					
3. Management					
4. Policy					

MONITORING AND FEEDBACK
PROVIDE FEEDBACK TO APPROPRIATE ACTION AGENCIES
STEP 3





In order to ensure success for the Implementation Program, you must provide feedback to appropriate action agencies. Use results of the diagnosis of implementation problems and achievements to develop three kinds of feedback.

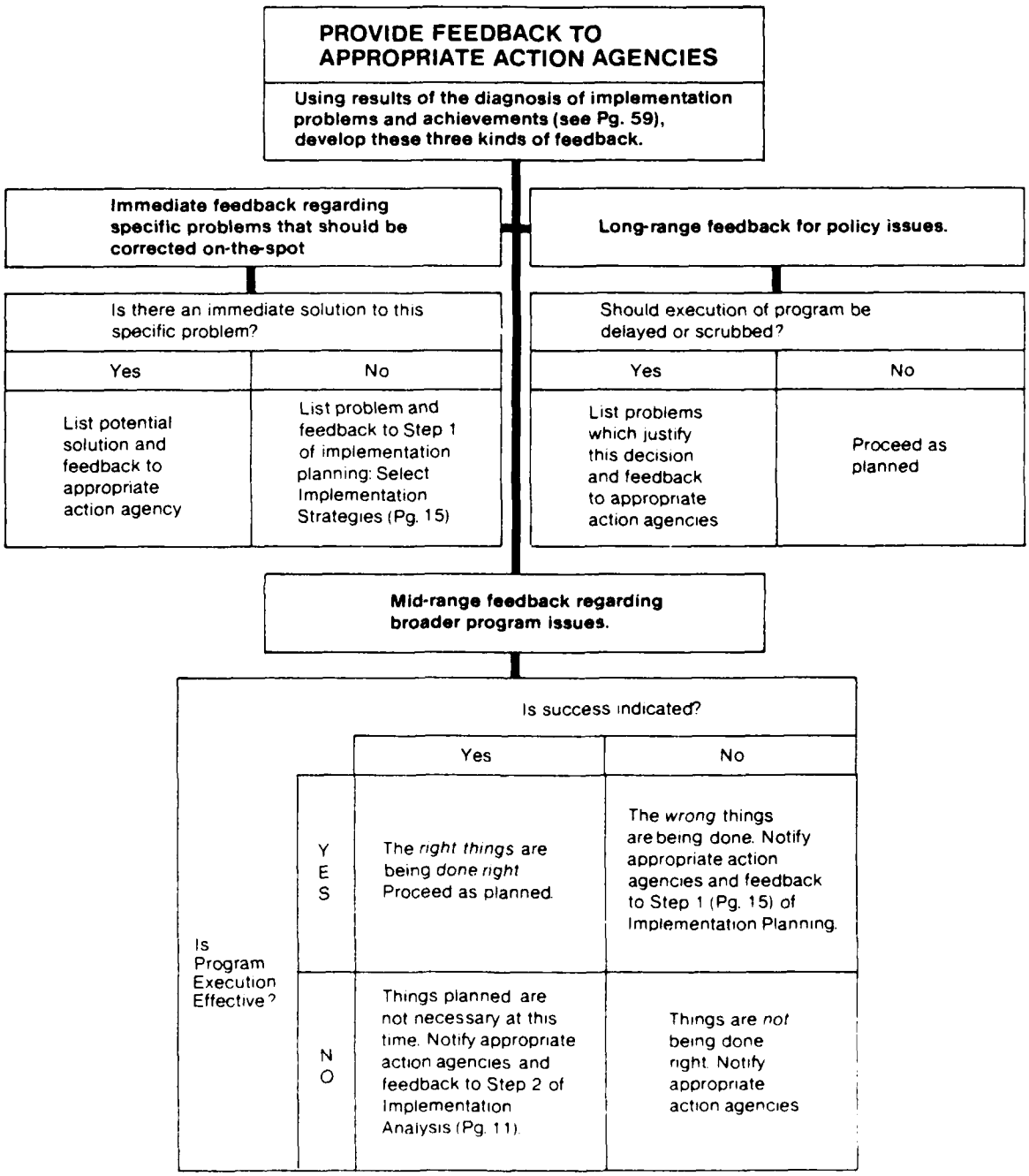
- **IMMEDIATE FEEDBACK REGARDING SPECIFIC PROBLEMS THAT SHOULD BE CORRECTED ON-THE-SPOT.** If there is an immediate solution to an implementation problem, make appropriate recommendations to the action agency. Otherwise return to Step 1 of Implementation Planning and alter your implementation program. You will have to select new strategies to cope with persistent or unexpected problems.

- **MID-RANGE FEEDBACK FOR BROADER PROGRAM ISSUES.** Use data collected to compare program execution with program success. This comparison will tell you if your plan is working, if it needs revising, or if the effort can be reduced without degrading implementation. Problems identified by this process may require solution at the MACOM level.

- **LONG-RANGE FEEDBACK FOR POLICY ISSUES.** Use diagnosis of implementation problems to assist high-level policy makers in determining whether the present product implementation program should be continued, modified, delayed or scrubbed.

The information shown in Figure 29 provides general guidelines for feeding information back to control the implementation program, recommend improvements in the product, and contribute to policy decisions to ensure that the product gets used to best effect in the operational environment.

FIGURE 29
GENERAL GUIDELINES FOR FEEDBACK



SUMMARY

This guide describes a strategy for implementing training products in operational units. It establishes procedures which guide an implementation effort from the time a product is fully developed until it is integrated into training in units. Its purpose is to ensure that the product is used in the way that it *should* be used. Using the guide's procedures you can analyze a training product's characteristics, forecast potential implementation problems, develop and execute a tailored-made implementation program and monitor your progress throughout the implementation process. The guide does *not* tell you how to develop a product, although it does provide feedback to developers about needed modifications which might improve the product's chances of being successfully implemented. It is *not* a manual for evaluating the training effectiveness of a product, although it does identify where such evaluations fit into an implementation program. TRADOC publications such as TRADOC Pamphlet 350-30 (Interservice Procedures for Instructional Systems Development [ISD]) describe procedures for training product development. Publications such as TRADOC Pamphlet 71-8 (Analyzing Training Effectiveness) describe procedures for planning and conducting training product effectiveness evaluations. What these manuals do not tell you is how to get a training product used. This guide will help close that "implementation gap" and ensure that products are used to best effect in operational units.

PRODUCT MANAGER'S IMPLEMENTATION CHECKLIST

The following checklist will assist in the analysis, planning, execution and monitoring of an Implementation Program for an exportable training product.

	TARGET DATE
CONDUCT IMPLEMENTATION ANALYSIS	
Obtain information for a training product analysis (pg. 9)	_____
Identify Potential Implementation Problems (pg. 11)	_____
DEVELOP AN IMPLEMENTATION PLAN	
Select Implementation Strategies (pg. 15)	_____
Develop action plans for each implementation stage (Execution Phases)	_____
-Stage 1: (pg. 27)	_____
-Stage 2: (pg. 35)	_____
-Stage 3: (pg. 43)	_____
-Stage 4: (pg. 51)	_____
Coordinate with external agencies involved in implementation effort (Preparation Phases)	_____
-Stage 1: (pg. 25)	_____
-Stage 2: (pg. 33)	_____
-Stage 3: (pg. 41)	_____
-Stage 4: (pg. 49)	_____
Establish outcome criteria for each implementation stage (Success Indicators Phases)	_____
-Stage 1: (pg. 29)	_____
-Stage 2: (pg. 37)	_____
-Stage 3: (pg. 45)	_____
-Stage 4: (pg. 53)	_____
DEVELOP PLAN FOR MONITORING AND FEEDBACK (pg. 19)	_____

	TARGET DATE
EXECUTE AND MONITOR THE IMPLEMENTATION PROGRAM	
Stage 1: Orientation	
- request support and make advanced coordination (pg. 25)	_____
- collect data and provide feedback to ensure adequate preparation (pg. 57)	_____
- execute action plans (pg. 27)	_____
- observe execution and provide feedback to ensure effectiveness (pg. 57)	_____
- measures success indicators (pg. 29, 57)	_____
- feedback information and recommend corrective action (pg. 59, 61)	_____
Stage 2: Fielding	
- request support and make advanced coordination (pg. 33)	_____
- collect data and provide feedback to ensure adequate preparation (pg. 57)	_____
- execute action plans (pg. 35)	_____
- observe execution and provide feedback to ensure effectiveness (pg. 57)	_____
- measure success indicators (pg. 37)	_____
- feedback information and recommend corrective action (pg. 59, 61)	_____

	TARGET DATE
Stage 3: Trial	
- request support and make advanced coordination (pg. 41)	_____
- collect data and provide feedback to ensure adequate preparation (pg. 57)	_____
- execute action plans (pg. 43)	_____
- observe execution and provide feedback to ensure effectiveness (pg. 57)	_____
- measure success indicators (pg. 53)	
- feedback information and recommend corrective action (pg. 59, 61)	_____
Stage 4: Integration	
- request support and make advanced coordination (pg. 49)	_____
- collect data and provide feedback to ensure adequate preparation (pg. 57)	_____
- execute action plans (pg. 51)	_____
- observe execution and provide feedback to ensure effectiveness (pg. 57)	_____
- measure success indicators (pg. 53)	_____
- feedback information and recommend corrective action (pg. 59, 61)	_____
- establish schedule and procedures for periodic review of product utilization	_____