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Development of the Army ROTC Management Simulation Program

by

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<p>Development of a system of simulations, which capitalizes on assessment center procedures, for use in training of management skills in Army ROTC is presented. The program consists of four independent modules of training material, an instructor's guide and an evaluation guide. The material provides the students the opportunity to perform managerial tasks such as decision-making, problem analysis, planning, organizing, delegation, control, and utilizing interpersonal skills. The program utilizes in-baskets,</p>																						

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20. Individual planning exercises, and role playing. It encourages group interactions and feedback on individual performance. The program was evaluated on a representative sample of Army ROTC units and was well received by both instructors and cadets.

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FOREWORD

The Army Research Institute for the Behavioral and Social Sciences (ARI) has, as part of its mission, provided R&D support to the Army Training and Doctrine Command (TRADOC) in its training mission over the years. Part of the ARI effort, in the Personnel Accession and Utilization Technical Area, has been to research new and more effective approaches to developing officer leaders.

Earlier ARI research on officer leadership revealed that skill factors could be meaningfully considered as composed of two domains: attributes associated with effective combat leaders and those associated with effective technical-managerial performance. This research has provided guidance for several advanced development efforts including insights into officer training approaches. The present report deals with the research conducted to develop a performance-based program to teach Army ROTC cadets basic management skills. The approach that was taken capitalized on the techniques and methodology of the Assessment Center process and adapted it to developing managerial skills.

A parallel effort, much shorter in administration time, used a battlefield simulation to provide Army ROTC cadets the opportunity to develop and test their military skills as rifle platoon leaders. Together, these "hands on" skill development research efforts provide the nucleus for evolving an Army ROTC program that produces more effective Army officers. Research is conducted under Army RDTE Program 2Q763731A768, FY 1976 Work Program, and is responsive to the special requirements of the Deputy Chief of Staff/ROTC, TRADOC.


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Technical Director

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SUBJECT: Interactive Simulation to Aid in Teaching of Management Concepts to ROTC Students (Contract DAHC 19-75-C-0004); Final Technical Report

BRIEF

The need to improve the quality of Army ROTC management instruction has led to the development of a program utilizing simulation methods in a management training course. The training package, labelled the Army ROTC Management Simulation Program, was designed to fulfill the following objectives:

- To develop management skills which will facilitate the future performance of ROTC students as Army officers.
- To develop the ability to recognize and evaluate the interpersonal skills of others.
- To increase the effectiveness of the participants' interpersonal skills as it relates to their effectiveness as managers.

The Management Simulation Program designates specific management skills as the focal content areas and includes simulation exercises designed to help students develop these skills. The identification and elaboration of targeted skills was the outcome of a review of the management literature as well as input from managers in a variety of organizations. The essential elements underlying the performance of a particular skill were also delineated and incorporated into the training exercises. The exercises and supporting written material were shaped into an instructional package which was field tested by the developer. The test resulted in feedback which led to modifications in the original package.

Next, a more comprehensive field test evaluation was conducted by ARI and the Training and Doctrine Command. It focused on student and instructor responses to implementation of the program in 17 schools following intensive instructor training. Written evaluations by students and instructors augmented by interviews with six selected instructors resulted in the following conclusions and outcomes:

- The simulation program was generally viewed by both instructors and cadets as effective and interesting.
- Student materials were generally found to be clear and complete. For some exercises, particularly in Module IV (identified below), deficiencies were noted and corrected.
- Instructor materials were generally found to be adequate. Complaints were relatively minor and easily corrected.
- With one exception, the length of the exercises was satisfactory to both instructors and cadets. One exercise was found to be too long and was shortened.
- Instructor comments indicated that prior training would be desirable. A Management Training Package designed to meet this need is planned.

SUBJECT: Interactive Simulation Brief (continued)

Following modifications responsive to the field test evaluation, the finished product emerged. This package is composed of four distinct but interrelated modules, with three to five exercises per module. Each module corresponds to a particular content area, as follows:

- Module One: Management Problem Analysis and Decision-Making (five exercises)
- Module Two: Management Planning and Organizing (three exercises)
- Module Three: Management Delegation and Control (three exercises)
- Module Four: Interpersonal Skills Required for Effective Management (four exercises)

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INTRODUCTION

The Army ROTC Management Simulation Program is the programmatic name given to the interactive simulation to aid in teaching of management concepts to ROTC students. The program was conceptualized and developed to not only improve the effectiveness of teaching management to ROTC students, but to help establish the relationship between two important military and civilian concepts--leadership and management. In the military, leadership is often characterized and perceived as a process utilized primarily in combat, while management is a peace-time process. The Army Field Manual 22-100 defines leadership in the following manner:

Military leadership is the process of influencing men in such a manner as to accomplish the mission.

The same manual defines management as:

The process of planning, organizing, coordinating, directing, and controlling resources such as men, materials, time, and money to accomplish the organizational mission.

Although FM 22-100 relates management and leadership as two components of command, the distinction between the two remains one in which leadership implies direct personal effect on subordinates while management implies indirect influence on subordinates.

Leadership is required for success in any military or civilian organization. The successful leader must also be an effective manager. The Army ROTC Management Simulation Program was conceptualized as a program which would provide skills in the interpersonal and management skills areas which underlie effective leadership.

Once management and interpersonal management skills were designated as the focal content areas of the program, the next step in the conceptualization process was to determine the mode of instruction. Three requirements for selecting the mode of instruction were identified: (1) the instruction should provide opportunity for "hands-on" experiences, i.e., students should have the opportunity to actively participate in the learning experience rather than merely receiving information (reception learning); (2) the program to be developed should provide skills, not merely theory; and (3) the program to be developed should provide an opportunity for the student to diagnose his/her strengths and weaknesses in the focal skill areas.

Experience with the assessment center method for identifying and developing management potential indicated that this process could provide a model for the development of a program which would coincide with the desired content and instructional objectives. The assessment center method utilizes a system of simulations to elicit behavior relative to specific management skills. The simulations depict actual situations with which managers are confronted. While individuals in the assessment center participate in the simulations, trained evaluators observe, record, classify, and evaluate their behavior relative to the targeted management skills. The results generated by assessment centers have been proven to be extremely accurate in evaluating management potential (Bray, Campbell, and Grant, 1974 and Byham, 1970).

Feedback from participants has indicated that participation in an assessment center is perceived as a management training experience. This is particularly the case when specific behavioral feedback is given relative to the participant's performance in the assessment center. Many organizations provide specific feedback to participants on their strengths and weaknesses in a number of management areas. The feedback provides the basis for establishing an action plan for development of the individual; therefore, in addition to being a powerful predictor of management potential, the assessment center method is also utilized to help develop management skills.

An extremely important aspect of establishing an assessment center is the assessor or evaluator training. Assessors are trained to observe, record, classify, and evaluate behavior within the context of the behavioral simulations of the assessment center. Traditionally, assessor training includes observing others in the simulations as well as participating in some of the simulations. After each exercise a highly structured discussion of the observed behavior is conducted in which the behaviors are related to targeted management skills.

A longitudinal study conducted by Development Dimensions, Incorporated (Thoresen, 1975) attempted to determine the perceived learning of managers as a function of assessor training. Although the objective of assessor training is to provide evaluation skills, the results of the study indicated that the assessors gained considerable learning in management skills that were directly applicable to their effectiveness as managers.

Conceptualization of the program ended and development began when it was decided to utilize a system of simulations based on assessment center technology to teach management and interpersonal skills to ROTC students.

PROGRAM DEVELOPMENT

The first phase of development was primarily concerned with the determination of the focal management skills for the program. Although the general management skill areas were determined during the conceptualization phase discussed above, it was essential to identify the most important management skills for inclusion into the program. One source of skills came from a review of a number of the most academically acceptable management sources available and abstracting those management skills on which the majority of the sources agreed were essential for success as a manager. (See Bibliography for most significant sources.)

Considerable difficulty was encountered in attempting to abstract those management skills upon which a majority of the sources agreed were essential for success as a manager. One reason for this difficulty was that many management texts or sources are written for high-level executives, not for the potential first-, second-, or third-level managers to whom the program would be targeted. Concepts such as forecasting and organizational policy-making had to be eliminated due to their lack of applicability for mid-management.

A second problem area in attempting to abstract the most important management concepts for inclusion in the program was that authors tend to use

different terminology and definitions to describe the same concept. For example, Allen (1964) defines the function of planning as: "The work a manager performs to predetermine a course of action." In conjunction with the definition, he delineates and defines seven activities of planning: forecasting, establishing objectives, programming, scheduling, budgeting, establishing procedures, and developing policies. Koontz and O'Donnell (1974) state: "Planning is an intellectual process, the conscious determination of courses of action, the basing of decisions on purpose, facts, and considered estimates." They go on to explain the nature of planning through four major aspects: contribution to objectives, primacy of planning, pervasiveness of planning, and efficiency of plans.

A second source of skills was a review of the dimensions sought in hundreds of assessment centers developed by Development Dimensions, Incorporated.

The third source of data was obtained by asking a number of effective managers in a variety of organizations what management skills they considered most essential to the success of a middle manager. The following management skills were identified and defined by incorporating the input from all three sources:

Problem Analysis - The process of efficiently securing facts and relating the facts of a problem to a solution.

Decision-making - The process of evaluating alternatives and rendering a logical judgment in an expedient manner.

Management Planning - The process of establishing a course of action to accomplish a specific goal.

Management Organizing - The process of establishing an efficient work environment in which specific goals can be achieved.

Management Delegation - The process of effectively utilizing subordinates by sharing authority and entrusting responsibility.

Management Control - The process of establishing procedures to regulate activities and evaluate results.

Interpersonal Management Skills - The ability to communicate clearly and interact effectively with an individual or group in order to accomplish a task.

These skills relate very closely to those identified in an American Management Association survey conducted by Dr. Robert F. Pearse entitled Manager to Manager: What Managers Think of Management Development.

In addition to providing substantiation for the selection of management skills, Dr. Pearse's survey also reinforced the "skills" orientation to teaching management concepts that had been proposed for the program. Results of the survey indicated that about 85 percent of the 2,026 managers questioned preferred short management training courses aimed at developing a single skill.

Once the focal management skills had been identified and defined, it was determined that a skills-oriented training program needed a more specific orientation or target than the definitions provided. A brainstorming session conducted by the program developers generated the idea that each of the focal management skills could be analyzed and approached in terms of their "essential elements." The concept of essential elements was created to provide explicit sequential guides to successful implementation or use of the focal management skill, i.e., the essential elements were to be developed to guide the manager's action relative to the management skill he/she is attempting to utilize.

Using the management text sources described above, assessment center information, and the input from managers throughout the country, the following essential elements were developed for each of the focal management skills (Note: In the case of management control, four types of control were identified and defined in lieu of using essential elements. Interpersonal management skill was broken down into sub-skills or dimensions of interpersonal management skill):

Essential Elements of Problem Analysis:

1. Define the problem as it relates to your function and goal.
2. Collect and evaluate all of the facts.
3. Determine the relationship between the facts and the problem.
4. Identify the most likely cause of the problem.

Essential Elements of Decision-making:

1. Determine if the facts are complete or whether more information is necessary to make a judgment.
2. Involve appropriate personnel in developing potential solutions (if appropriate).
3. Develop and evaluate alternative solutions to the problem to be certain that they are consistent with your function and capability.
4. Consider the effects of your decision on personnel and resources.
5. Decide whether your decision will accomplish the desired results.
6. Make your decision as expeditiously as possible.

Essential Elements of Management Planning:

1. Define with your superior an explicit goal and set a date for its accomplishment.
2. Identify the component elements required to accomplish the goal.
3. Establish priorities and a time sequence for the implementation of each component element.
4. Identify and obtain the resources necessary to implement the component elements.
5. Involve key personnel in the planning process.
6. Communicate the plan to get complete understanding and commitment.

Essential Elements of Management Organizing:

1. Identify the work to be completed in order to implement each component of your plan.
2. Assign personnel based on their capability to perform the function involved.
3. Provide appropriate facilities, equipment, and resources to complete assignments.
4. Provide adequate opportunity and a reasonable schedule for the completion of the task.
5. Establish avenues of communication to maximize cooperation by the elimination of interdepartmental and interpersonal barriers.

Essential Elements of Management Delegation:

1. Identify the projects or problems to be delegated.
2. Select the most likely subordinate to whom the project or problem should be delegated.
3. Define the limits of additional authority to be delegated to the subordinate.
4. Plan to provide the training necessary to assume the additional responsibility (if appropriate).
5. Communicate the new responsibilities and clearly indicate the expected results.

Four Types of Control:

1. Procedural Control - the establishment of a system to regulate activities and evaluate results.
 - a. Control by Report - maintaining awareness of activities and evaluation of results by means of regular reports indicating the status of a particular project or process.
 - b. Control by Exception - maintaining awareness of activities and evaluation of results by requiring reports only when there is a deviation from an established standard.
2. Individual Control - regulation of activities and evaluation of results by personal direction.
 - a. Circumstantial Control - direct communication to a subordinate requiring specific regulatory activity or evaluation within a time framework.
 - b. Observational Control - maintaining awareness of activities and evaluation of results by personal inspection and observation.

Dimensions of Interpersonal Management Skill

Sensitivity - Skill in perceiving and reacting appropriately to the needs of others. Skill in perceiving objectively one's impact on others and reacting accordingly.

Flexibility - Ability to modify behavioral style and management approach to reach a goal.

Listening Skill - Ability to select important information in oral communications.

Persuasiveness - Ability to organize and present material in a convincing manner.

Tenacity - Tendency to stay with a problem or line of thought until the matter is settled.

Oral Communication - Effectiveness of expression in individual or group situations (includes gestures and nonverbal communications).

Once the focal management skills and essential elements had been identified and defined, the basic format and instructional approach of the program was developed. Since the program was to be as flexible as possible so as to fit into a number of ROTC scheduling configurations, it was divided into the following four modules:

Module One: Management Problem Analysis and Decision-making

Module Two: Management Planning and Organizing

Module Three: Management Delegation and Control

Module Four: Interpersonal Skills Required for Effective Management

The next step in the development process was to establish the instructional components for the program. Although simulations were to be the primary vehicle for instruction, an integrated system linking the simulations with one another, with the essential elements, and with other cognitive material related to the targeted management skill had to be developed to maximize learning. The following unique mode and sequence of instructional components was designed as the basic pattern for the learning experience:

1. Relevant text material which precisely defines the nature of each management skill, explains why it is important, and delineates the essential elements a manager must follow to successfully develop the management skill.
2. Brief lectures which introduce each module and illustrate the management skill.
3. Simulation exercises targeted to specific essential elements of the management skill.
4. Comprehensive simulation exercises which combine all the essential elements and require the student to illustrate all of the skills underlying the targeted management skill.
5. Group presentation and/or discussion of the results of each exercise.

6. Highly structured feedback and reinforcement of appropriate responses relative to each exercise and the specific essential elements.

The next step in the development process was to design and develop exercises (simulations) which would give students the opportunity to perform the management function to be learned, i.e., exercises were developed to elicit behavior relative to the targeted management skills. Two types of simulation exercises were developed. One type of exercise was designed to elicit and illustrate behaviors relating to specific essential elements underlying a particular management skill. Each simulation was designed to place the student in a realistic organizational situation. The organizational setting varies from exercise to exercise; the management assignment of the participant also varies (e.g., he/she may be a city manager, retail store manager, or a plant manager).

The second type of simulation exercise is very comprehensive in that it elicits behaviors underlying all of the essential elements for one or more management skills. This type of exercise was used primarily as the final exercise in the system of simulations on which the training program had been built. A description of the various exercises developed for each module appears below:

Description of Simulation Exercises for Module One: Problem Analysis and Decision-making

1. Group Fact-finding Exercise - In order to illustrate the complexity of the fact-finding process, the group will be presented with a situation in which they will be required to collect information relevant to a problem by questioning a resource person (instructor). The exercise is targeted to essential elements #1, #2, #3, and #4 of problem analysis. The objective of the exercise is to illustrate the importance of fact-finding through appropriate questioning and to illustrate the areas the questioning should explore to ensure adequate understanding of the problem.
2. Registrar's Office Fact-finding Exercise - This exercise is targeted to essential elements #1, #2, #3, and #4 of problem analysis. It is more complex than the group fact-finding exercise. The breadth and depth of questioning will be analyzed for each student or group.
3. Judgment Exercise - This exercise is targeted to essential elements #3, #4, #5, and #6 of decision-making. Participants are given all of the data relevant to the problem described in the Registrar's Office Fact-finding Exercise. The participants are required to determine possible alternative solutions to the problem, as well as perform related activities. The exercise will be done in small groups (three to six participants).
4. Decisiveness Exercise - This exercise is targeted to essential element #1 of decision-making. It indicates one's readiness to make decisions based on the data available and illustrates

factors that are crucial to decisiveness. The exercise consists of a series of vignettes which the participant must analyze to decide whether or not to make a decision and why.

5. Executive Director of the Community Fund (Parts A & B)* - This exercise is targeted to all of the essential elements of problem analysis and decision-making. The participant will be required to play the role of the executive director of a community fund organization about which he/she has been given a great deal of data. Based on his/her analysis of the data, the participant is required to make a number of decisions and present them to the Chairman of the Board.

Description of Simulation Exercises for Module Two: Management Planning and Organizing

1. Planning the Bicentennial Exercise - This exercise is targeted to essential elements #2, #3, #4, and #6 of planning. It will require the participants to play the role of a city manager who has been charged with planning the city's bicentennial celebration based on the goals and resources provided by the City Council. (May be done individually or in small groups.)
2. Organizing the Bicentennial Exercise - This exercise is targeted to essential elements #2, #3, #4, and #5 of organizing. It is a follow-up to the above exercise. The city manager must organize the bicentennial plan on which the City Council has agreed. (May be done individually or in small groups.)
3. Planning and Organizing a Sales Trip Exercise* - This exercise is targeted to all of the essential elements of planning and organizing which are applicable to individual planning (essential elements #1, #2, #3, #4, and #6 of planning and #1, #3, and #4 of organizing). The exercise is designed to illustrate the skills required to plan and organize one's own work. The participants will be placed in the role of a professional salesperson who must plan and organize a sales trip based on data about the product line, market area, and geographic area. He/She will be required to plan and organize the trip by following the essential elements. (May be done individually or in small groups.)

Description of Simulation Exercises for Module Three: Management Delegation and Control

1. Delegation Exercise - This exercise is targeted to illustrate the management behaviors relevant to essential elements #1, #2, and #3 of management delegation. More specifically, this exercise is designed to answer the following questions: What is delegation? Why delegate? To whom do you delegate? How does one delegate?

*Major Comprehensive Exercise for the Module.

2. Control Exercise - This exercise is designed to illustrate the four types of management control more completely.
3. Delegation and Control In-basket* - This exercise is designed to illustrate all of the essential elements of both delegation and control, as well as the relationship between the two. In the exercise, the student is required to play the role of a plant manager. He/She must handle the accumulated letters, notes, and requests found in a simulated in-basket. The in-basket contains twenty items which require the student to effectively utilize the essential elements of delegation and control.

*Major Comprehensive Exercise for the Module.

Description of the Instructional Approach to Module Four: Interpersonal Skill Required for Effective Management

The development of interpersonal skill for effective management is enhanced by the ability to objectively evaluate interpersonal performance in subordinates, as well as oneself; therefore, the first part of this module consists of training in the evaluation of the interpersonal skills.

The following steps are followed in order to develop the evaluation skills:

1. Define the interpersonal management skills.
2. Identify the behaviors that underlie each skill.
3. Observe, record, and evaluate the behaviors related to each of the targeted interpersonal skills.

The second part of the module consists of interpersonal management skill practice in which the student is required to play the role of a manager and interact with a subordinate. The student is given feedback on effectiveness of interpersonal skills by other students using skills acquired in the first part of the module.

It should be evident that the Management Simulation Program was developed to teach skills. All of the target skills in the program are essentially processes, such as the planning process and the organizing process. The program was developed to provide the students with process-oriented skills which they will be able to use as managers in the Army, the business world, or the government. The simulations are merely vehicles to teaching these processes. The simulations could have been set in the military, the government, or business. The setting of the exercises is not particularly important, but the process underlying each exercise is crucial to success as a manager.

A civilian management setting was selected for use with ROTC cadets. The major factor in this decision was ROTC cadets are more familiar with the civilian management environment than the Army management environment although the skills underlying the functions and responsibilities are the same. The use of unfamiliar problem environments would distract the cadets from learning the targeted management skills by encumbering the student with need to learn the Army related functional content.

PILOT TESTING BY DEVELOPER

An informal testing program to determine if the level of complexity and nature of the simulations developed were appropriate for ROTC students was conducted at Duquesne University, the University of Pittsburgh, and Carnegie-Mellon University. Module Four was presented to a class of six ROTC juniors at Duquesne University. Modules Two and Three were tested at the University of Pittsburgh. Eleven senior ROTC students were used. Carnegie-Mellon University provided the field tests for Module One in a sophomore ROTC class of eight.

The interest and enthusiasm of the students at all three institutions were assessed as being very high. Group activities generated a great deal of relevant discussion among the students. During the evaluation and feedback sessions for each simulation, students illustrated a high degree of involvement by the nature of their questions and the spirited dialog between students who approached the simulation differently.

Both the students and instructors provided valuable feedback relative to the nature and complexity of the exercises as well as suggestions for modifications in the essential elements. The ROTC instructors were present at all of the classes during the preliminary field test and were asked to take notes and make suggestions. All of the instructors provided considerable input which was utilized in making the revisions which will be described below.

An informal critique was held at the end of each field test. The students' evaluations were extremely positive in nature. They were particularly vocal about the practical nature of the simulations and the "hands-on" approach of the program. In addition to a positive response by the students, the instructors indicated they would definitely implement the program when it became available.

Based on the spring 1975 field testing, an in-depth evaluation of the Program was made which resulted in the following revisions:

1. The essential elements underlying the targeted management skills were altered to provide a more logical sequence and to clarify the meaning of several essential elements.
2. The content of Modules One and Two was revised. One exercise was added to Module One (Problem Analysis and Decision-making). The additional exercise was a group fact-finding exercise designed to illustrate the complexity of the fact-finding process. In addition to the new exercise, the Judgment Exercise was modified so that its content would relate to another exercise in the module.
3. The orientation of Module Two (Planning and Organizing) was altered to include a consideration of individual planning (i.e., the manager planning his own time and activities) as well as planning for others (i.e., the manager's division, department, or unit). To illustrate the skills necessary for individual planning and organizing, a new exercise was added to the module.

This exercise was called the Planning and Organizing a Sales Trip Exercise and requires the cadet to utilize the essential elements of individual planning and organizing to plan a highly complex sales trip.

The development of text material was a major activity during this stage of the program development. The text was developed to provide the cadet with a comprehensive introduction to the targeted management skill. It was written to impress the learner with the importance of how essential elements relate to each other. A number of case study examples were utilized to illustrate each essential element and its relationship to the targeted management skill.

In addition, the text material was developed to provide a basis for lecture material and background for the instructor of the program.

MAJOR FIELD TESTING BY DEVELOPER

The field trial was conducted on eight successive Saturdays from 13 September to 1 November, 1975. Fourteen (14) Army ROTC seniors enrolled in Military Science 408 were in the field-trial program which met from 8:00 a.m. to 11:00 a.m. on the Indiana University of Pennsylvania (IUP) campus. The Associate PMS was the originally scheduled instructor for Military Science 408. He was present during all class meetings and gave valuable feedback throughout the 24 hours of the course-time used for the field trial.

One very important consideration posed by the Associate PMS was in relation to the evaluation of student performance in the program, i.e., how would student performance be evaluated for purposes of a grade? Since students may spend as many as 36 class hours in the program, this question of how they should be evaluated was resolved by the development of two student evaluation techniques.

The first was a Student Performance Evaluation. Essentially, the Student Performance Evaluation is a paper-and-pencil examination of the concepts contained in the text material. The Evaluation is composed of three parts. Part I is a 30-question Concept Classification Exercise which requires the student to classify key statements as to their relationship to one of the six management skills in the program. This part of the Evaluation measures the student's understanding of the management concepts and their underlying essential elements.

Part II of the Student Performance Evaluation requires short answers (two or three sentences) which impact on how, why, and where the management concepts are used, as well as a deeper understanding of the processes such as, "Give three reasons why a manager should delegate." Also, Part II contains two questions which focus on individual planning and organizing. These questions require the student to plan his/her career in accordance with specific essential elements of planning and organizing.

Part III of the Student Performance Evaluation is a Behavior Classification Exercise. This exercise taps the student's understanding of the interpersonal skills necessary for management which were taught in Module Four.

An in-basket exercise was designed to provide a basis for the evaluation of the student's management and interpersonal skills. The in-basket was developed and required the student to play the role of a branch store manager of a moderate size department store. The in-basket contains 25 items which were scored to give a second evaluation index on the student's performance. Both evaluation instruments were tested during the field trial.

The field trial at IUP ended on 1 November, 1975. The enthusiasm and support of the instructor and students were very encouraging. The field trial provided a number of insights into the program from the perspectives of both students and instructor.

Several minor exercise modifications were made based on student input and feedback. One major modification was made in which the Branch Store Manager's In-basket was changed considerably. The version of the in-basket used in the field trial required the student to do a disproportionate amount of problem analysis in comparison to other targeted management skills that were to be evaluated by the in-basket. Therefore, many of the items in the Branch Store Manager's In-basket were changed to require a more directly observable response on the part of the student. Also, the nature of the items was modified to yield responses targeted to all of the management skills in the program in a more proportionate way.

ROTC INSTRUCTOR TRAINING

An instructor training program was conducted on December 2, 3, and 4, 1975. Twenty (20) ROTC instructors representing 22 schools and all four ROTC regions were in attendance. The instructors were provided with a binder containing all text and exercise material required to conduct the program. The instructors participated in each exercise as students after which a discussion of appropriate instructor behavior was conducted with particular emphasis on how to teach the process underlying the targeted management skills.

One of the most important conclusions resulting from the instructor training was that additional instructional material was required. Although the instructors received three intensive days of training in the Program, it was their opinion that step-by-step aids for the instructors would enhance their effectiveness; therefore, comprehensive instructor's guides for each module plus an introductory lecture were developed and provided to the instructors prior to the field testing. In addition, an instructor's guide to the Branch Store Manager's In-basket was developed to enable the instructors to evaluate the in-basket responses. The instructors at the training program contributed significantly to the development of a list of possible courses of action for each item in the in-basket. These were incorporated into the instructor's guide and added substantially to the ease of scoring the in-basket.

The consensus of the instructors in the training program was that the civilian setting for the simulations was appropriate for ROTC cadets. They also indicated that the civilian setting would be more effective than an Army context for the on-campus teaching situation.

MAJOR FIELD TESTING BY ROTC INSTRUCTORS

Twenty-one of the twenty-two schools represented by officers at the instructor training program participated in the field trial during the winter term, 1976. The participants were urged to use as many of the modules as possible to gauge instructor and student reaction. It was recognized each would not be able to try out all of the modules due to timing and scheduling difficulties. Nevertheless, six schools were able to field test the entire four modules while others tested one or more modules.

EVALUATION PROCEDURE AND RESULTS

Since the Management Simulation Program is unique and novel in many respects, it was extremely important to determine if the program was practical and feasible for classroom use. Another important issue was whether or not it could generate and maintain student interest and involvement. To answer these questions, an evaluation procedure was designed by ARI. Inputs from Development Dimensions, Incorporated and TRADOC were obtained to assure that all concerned parties' interests were met.

PROCEDURE

Twenty-one schools participated in the field trial during the winter term, 1976. Although the extent of participation was limited due to scheduling, six schools were able to field test the entire four modules and eleven others provided data on one or more modules. Data from the remaining four schools did not arrive in time to be included in the evaluation. Since most schools did not provide both cadet and instructor responses for all four modules, and since a new set of five subjects was randomly drawn from each school for the evaluation of each module, the composition of the cadet and instructor samples varied from module to module. Cadet evaluations of Modules I, II, and III were each based on an n of 55, while 50 cadets evaluated Module IV. The n for instructor evaluations of Modules I, II, III, and IV was 11 in each case. However, the n for many items fell below the cadet or instructor n for the appropriate module due to failure of some respondents to answer every question.

Separate questionnaires for instructors and cadets were constructed for each of the four modules (see Appendices A and B for evaluation forms). Each questionnaire contained questions for each of the exercises as well as the overall module. The questionnaires for Modules I, II, and III were designed to serve four distinct functions: (1) to gauge overall effectiveness and acceptability, (2) to identify problem areas, (3) to elicit opinions concerning preferred techniques of teaching the material, and (4) to elicit suggestions for improvement. Module IV questionnaires were shorter and dealt with only three of the four functions listed above. Opinions concerning preferred teaching techniques were not solicited.

RESULTS

Effectiveness and Acceptability: Modules I, II, and III

For each exercise in the first three modules, cadets and instructors each provided a single rating of effectiveness. The following is a sample cadet question: "As a learning experience, how effective was this exercise in illustrating the complexity of the fact-finding process through questioning?" Table 1 (See Appendix C), which summarizes the results of this study, shows consistently high ratings by cadets for all exercises in these modules. On a scale of one ("not effective") to five ("highly effective"), mean ratings were above the "effective" (3.0) level in every case, ranging from 3.31 to 3.69.

Instructors responded to the following question for each exercise: "How effective was the exercise in attaining its instructional objectives?" Their responses were even more positive than those of cadets. On the 5-point scale described above, ratings ranged from 3.73 to 4.40, with all but two of the exercises receiving means above four ("very effective").

For the cadet evaluations for each module two effectiveness questions were asked. One dealt with development of cadet skills, such as: "How effective do you feel this block of instruction was in providing you with skills to successfully implement the essential elements of planning and organizing?" Means were substantially above the "effective" (3.0) level in every case (Module I: 3.42; Module II: 3.62; Module III: 3.73). The other question, used for Modules I and II only, dealt with development of cadet understanding. For example, "How effective was the text material in providing you an understanding of planning and organizing and the essential elements that underlie the management concepts?" On the same 5-point scale, means were again high (Module I: 3.76; Module II: 3.43).

For the instructor module evaluations, two direct effectiveness questions were also asked. Again, one concerned skills development, such as "How effective was the module in providing the opportunity for students to develop the skills underlying delegation and control?" Instructor responses were even more favorable than cadet responses, falling well above the "very effective" (4.0) level in every case (Module I: 4.45; Module II: 4.32; Module III: 4.64). Similar results were obtained on the other effectiveness dimension, development of cadet understanding, exemplified by this question: "How effective was the test material in providing the students an understanding of delegation and control?" Again, instructor means were consistently above the "very effective" level (Module I: 4.55; Module II: 4.40; Module III: 4.73).

Other indications of effectiveness were provided. In response to the question of whether the exercise helps develop a useful skill, 100% indicated "yes" in 10 of the exercises, 90% in two, and 71.4% in one. Instructors were also asked if the exercise helps gain a better understanding of cadets' ability. On this question, 100% responded "yes" in 11 exercises and approximately 90% in the other two.

Acceptability of each of the exercises in the first three modules was assessed by the following question to cadets: "How interesting did you find the exercise?" Interest was consistently judged high, with means for each

exercise falling above the 3.0 ("interesting") level on a 5-point scale (1.0 = "dull," 5.0 = "extremely interesting"). The lowest mean was 3.29; the highest was 3.65.

Overall acceptability of Modules I, II, and III was determined by a question to both cadets and instructors requesting the respondents to compare the interest-generating capability of this mode of instruction to other methods on a scale of one ("generates much less interest than other methods") to five ("generates much more interest"). Cadet responses were highly favorable, with means clustering around the 4.0 -- "more interesting than other methods" -- level (Module I: 4.13; Module II: 3.76; Module III: 4.06). Instructor responses were even more favorable (Module I: 4.80; Module II: 4.45; Module III: 4.45). Cadets also indicated how strongly they would recommend each of the modules to others on a scale of one ("not recommend") to three ("highly recommend"). The means fell between the "recommend" (2.0) and "highly recommend" levels (Module I: 2.55; Module II: 2.30; Module III: 2.45). A final acceptability question asked instructors whether or not they enjoyed teaching the module. Instructors unanimously (100%) agreed they enjoyed teaching Modules I and III and most (81.8%) claimed to have enjoyed teaching Module II.

Effectiveness and Acceptability: Module IV

Cadets rated the effectiveness of two tasks (Behavior Example and Behavior Classification) in Module IV. A sample effectiveness question used is this: "How effective was the exercise in helping you distinguish between behaviorally based statements and vague judgmental statements?" On the familiar 5-point scale, cadet means were consistently above the "effective" level (Behavioral Example: 3.22; Behavior Classification: 3.33). For the task labelled "Using the Audio Cassettes of Supervisor-Subordinate Situations and the Model Observer Report Forms," cadets were asked how effectively they recorded behavior. The resulting mean of 2.57 fell between the "less than effectively" (2.0) and "effectively" (3.0) levels.¹ For the Interpersonal Skill Practice, cadets were asked if they were able to provide accurate feedback effectively (mean = 3.46, above the "effectively" level) and if the feedback they were given was accurate (yes = 100%) and beneficial (yes = 100%).

Instructors rated directly the effectiveness of three Module IV tasks (Behavior Example, Using the Audio Cassettes of Supervisor-Subordinate Situations and Model Observer Report Forms, and Behavior Classification). A sample instructor effectiveness question used is this: "How effective was this exercise in helping students distinguish between descriptive behavioral statements and vague judgmental statements?" On the 5-point scale, the Behavior Example (3.50) and Behavior Classification (3.50) means were considerably above the "effective" level, but Using the Audio Cassettes of Supervisor-Subordinate Situations and the Model Observer Report Forms received a mean of 2.20 (2.0 = "less than effective" level). (See Footnote 1).

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1. This exercise relied heavily on tapes, from which observations of behavior were recorded. The low ratings given the exercise on a variety of measures were probably due to the poor quality of these tapes. For a description of this problem and the manner in which it was corrected, see the section titled "Modifications of the Program Based on Field-Test Results."

Instructors indirectly rated the effectiveness of each task in Module IV, with the exception of the Observer Evaluation Form task, on the question of whether the task helps develop a useful skill. The exercise involving "Using the Audio Cassettes of Supervisor-Subordinate Situations and the Model Observer Report Forms" received a 57.1% positive response. The percentage of instructors responding "yes" on the other exercises ranged from 81.8 to 100. On the Interpersonal Skill Practice, instructors were also asked if the exercise helps gain a better understanding of cadets' ability. All instructors responding agreed that it does help gain such understanding.

Cadets were asked two questions concerning the overall effectiveness of Module IV. One was as follows: "How effective do you believe this module was in providing you the opportunity to develop the ability to recognize and evaluate the interpersonal management performance of others?" The mean response, 3.46, was well above the "effective" level on the 5-point scale. The other question was: "How effective was the module in providing the opportunity to increase the effectiveness of your interpersonal management skill?" The mean response, 3.50, was again high on the same 5-point scale.

Instructors were also asked two questions on the overall effectiveness of the module. One was: "How effective was this module in providing the opportunity to develop the ability to recognize and evaluate the interpersonal management performance of others, i.e., how well did the cadets learn to observe, record, classify and evaluate the interpersonal skills of other cadets in the interpersonal skill practice session?" The mean response on the 5-point scale was exactly at the "very effective" (4.00) level. The other question was "How effective was the module in providing the opportunity to increase the effectiveness of the cadet's interpersonal management skills?" Instructors responded to this question with a mean of 4.30 on the same scale.

When asked: "How interesting did you find this module?", cadets responded at a level between "interesting" (3.0) and "very interesting" (4.0), with a mean of 3.50 on a 5-point scale. Instructors were asked: "How do you compare the mode of instruction used in this module to other methods of instruction in regard to its ability to generate student interest and enthusiasm?" Their mean response, 4.60 on a 5-point scale, fell between "generates more interest than most other methods" (4.0) and "generates much more interest" (5.0). On another measure of acceptability, cadets' mean response to the question "How strongly would you recommend this module to other students (both ROTC cadets and other students)?" was 2.24 on a 3-point scale, between "recommend" (2.0) and "highly recommend" (3.0). When asked, "Did you enjoy teaching the module?", 88.9% of the instructors responded with a "yes."

Possible Problem Areas

Possible problem areas were examined by questions in the following categories: student materials, instructor materials, difficulty and realism of exercises, and length and time demands of exercises.

1. Student Materials: Modules I, II, and III. Student materials for the exercises in the first three modules were examined by a

series of "yes-no" questions. First, students were asked: "were the instructions complete and clear?" The response was very positive. For 5 out of 12 tasks, all students replied "yes," and for none of the exercises did less than 87% of the students respond favorably. Next, for all exercises but the Decisiveness Exercise, students were asked: "Did you understand the nature of the role you were asked to assume in the exercise?" Here the response was even more favorable, with no exercise receiving less than a 96.3% positive response and 8 of 11 tasks receiving a unanimously positive response. The third question was, "Did you understand the task required in the exercise?" Six of twelve tasks received only "yes" to this query, and no task received less than a 92.7% "yes" response.

Cadets were also asked to indicate, for each of the three modules, their response to the question: "Did you find the text material for this module clear and complete?" The percentage of "yes" responses ranged from 86.8% for Module II to 100% for Module I, with Module III receiving 92.0%.

2. Student materials: Module IV. In Module IV, the question, "Were the instructions complete and clear?" was asked for the Behavior Example Exercise. The response was 84.0% positive. Students were asked to assess their comprehension of the nature of their role with respect to the Interpersonal Skill Practice. When asked, "Did you understand the nature of your role when you were required to play the role of the Plant Manager?", 90.9% responded "yes." When this question was repeated for the role of one of the Plant Manager's subordinates, 95.6% said "yes." Students were asked whether they understood the task required for each of the exercises. The percentage of "yes" responses, in every case except that involving "Using the Audio Cassettes of Supervisor-Subordinate Situations and the Model Observer Report Forms," which received but a 57.4% favorable response, fell within a range from 84.0% to 95.8%.
3. Instructor Materials: Modules I, II and III. Instructor materials were evaluated for each exercise by instructors on the "yes" or "no" question: "Difficult or complicated to administer?" On 6 of 13 tasks, none of the instructors indicated such a problem, and on none of the tasks did more than 18.2% of the instructors respond "yes" to this question.

On the module evaluations, instructors were asked: "Was the Instructor Guide complete enough for you to effectively conduct the course of instruction?" All instructors for Modules II and III and 81.8% for Module I agreed that it was. Another question was concerned with the adequacy of the lecture-text material. An example question was: "Did the lecture-text material provide you with sufficient background on planning and organizing to give the introductory lecture, administer the exercises, and answer questions?" All instructors agreed that the materials for Modules I and III were sufficient; 95% agreed for Module II. Finally, instructors were asked: "Would the combination of Instructor Guide and Lecture-Text Material be sufficient for an

instructor who has had no prior training to implement this module of instruction?" Although the majority of instructors answered "yes" for each module, the percentages indicated a fair amount of doubt (Module I: 72.7%; Module II: 66.7%; Module III: 81.8%).

4. Instructor Materials: Module IV. Instructors were asked whether each of the tasks except completion of the Observer Evaluation Form was "Difficult or complicated to administer." While 80% of the instructors said "yes" with respect to "Using Audio Cassettes of Supervisor-Subordinate Situations and The Model Observer Report Forms," in no other case did more than 18.2% of the instructors report such difficulty.

For Module IV as a whole, 100% of the instructors responding felt the Instructor Guide was complete enough for them to effectively conduct the course of instruction. Also, 75% felt that the Instructor Guide would be "sufficient for an instructor who has had no prior training to implement this module of instruction."

5. Difficulty and realism. Difficulty for all exercises, excluding the Observer Evaluation Form task, was measured by the following question given to cadets: "How difficult was it for you to complete the task required in the exercise?" Responses could range from one ("easy, no challenge") to five ("extremely difficult, much too challenging"). Mean responses for exercises ranged from 2.80, or just under "difficult" (3.0), to 3.70, or somewhat less than "very difficult" (4.0).

A related question, administered to instructors for all exercises in Modules I through III and the Interpersonal Skill Practice in Module IV, was: "How appropriate in terms of realism and complexity was the exercise for students?" Responses could range from one ("not appropriate") to five ("extremely appropriate"). The actual range of mean responses for individual exercises was from 3.82, or just under the "very appropriate" (4.0) level, to 4.60.

6. Length and time demands. Difficulties posed by length and time demands were evaluated on the basis of questions addressed to both cadets and instructors. Most such questions were presented only for exercises in the first three modules, not for Module IV exercises. Cadets were asked for all exercises in Modules I through III except the Group Fact-finding Exercise whether the task was too long, too short, or about right. The majority found the length of every exercise but one to be about right. The exception was the Sales Trip Exercise, which 55.8% of the cadets found too long. For the other exercises, between 65.5% and 83.3% of the respondents chose the "about right" response. Consistently, more cadets found an exercise to be too long than too short.

For all exercises in the first three modules except for the Fact-finding and Decisiveness exercises, cadets were asked: "Were you able to complete the task required in the exercise?" In every case, most felt they were able to do so, with percentage of

positive responses ranging from 84.6 to 98.2 with all exercises but one receiving above 94%.

Instructors were asked whether each of the exercises in Modules I, II and III should be longer, shorter, or whether each was "OK." In only one case, the Sales Trip Exercise, where 50% thought the exercise should be shorter and 40% judged it "OK," did less than a majority indicate the length was appropriate. Aside from this exception, the percentage of respondents choosing the "OK" option ranged from 63.6 to 100.

Instructors also responded with a "yes" or a "no" to the question: "Were students able to complete the tasks required by the exercises?" for exercises in Modules I, II, and III. The majority responded with a "yes" for every exercise with percentages of "yes" ranging from 80.0 to 100.

Finally, instructors estimated the time needed by cadets to complete exercises in the first three modules and the Behavior Example and Behavior Classification exercises in Module IV. Mean estimates for exercises ranged from 27.3 to 143.8 minutes, with the Sales Trip Exercise judged to require the greatest amount of time.

Preferred Teaching Techniques

Data concerning preferred techniques of teaching were gathered in two areas: learning environment and size of learning unit. For the first topic, students were asked whether each of the exercises in Modules I, II and III would be better done in class, as homework, or in either environment. For eight of the exercises, more cadets preferred class than homework, while in the remaining three, a plurality preferred homework. (See Table 1, Appendix C for specific exercises.) Instructors were asked whether the same exercises were more appropriately completed in class or as homework. For five of the exercises, a majority preferred they be completed in class; for four others, a majority preferred homework; and, for three other exercises, equal numbers favored both class and homework.² When asked whether an exercise was actually completed in class or as homework, a majority of instructors indicated class in seven cases, homework in four cases, and no majority obtained in one case. (See Table 1, Appendix C.)

Size of learning unit refers to whether an exercise was completed by groups or by individuals. When asked which approach was used for exercises in the first three modules, a majority of instructors indicated groups in three cases, individuals in eight cases, and no majority was found in one case. (See Table 1, Appendix C.)

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2. The discrepancy between the total of twelve exercises considered by instructors and eleven exercises considered by students is accounted for by the treatment of the Organizing the Bicentennial as two tasks in the instructor questionnaire but as only one task in the cadet questionnaire.

Suggestions for Improvement

Suggestions for improvement were solicited to open-ended questions to both cadets and instructors. The request to "note any changes or additions that would help improve this section" was directed to cadets and instructors at the end of each exercise and to instructors at the end of each module. Cadets were asked to make a summary evaluation of Modules I, II, and IV, indicating strengths and noting "any changes or additions you feel would improve the total module." From these questions came a large number of suggestions. While the great majority of them either led to direct but minor changes or could not be acted upon for practical reasons or because of irrelevance to program goals, some of the more prevalent suggestions did lead to major changes. These included shortening the length of the Sales Trip Exercise, improving the quality of the tapes in the "Using Audio Cassettes and Model Observer Report Forms" exercise, and improving the instructions to the Behavior Example Exercise.

FOLLOW-UP INTERVIEWS

A series of phone interviews with each of six instructors who had used all four modules was arranged, both to check the validity of the information received through the written evaluation and to provide greater understanding of the weaknesses of the Management Simulation Program so that modifications could be properly implemented. Questions on instructor materials, student instructions, and Program exercises were prepared and addressed to the instructors. The responses of the instructors were consistent with the findings of the field trial reported above, indicating that the Program was generally effective but that some of the exercises needed improvement.

MODIFICATIONS OF THE PROGRAM BASED ON FIELD-TEST RESULTS

Based on the results of the evaluation from both instructors and students as well as the phone interviews with six of the instructors, modifications in the Program were made. The primary area of concern was Module IV. Although a number of instructors felt that this module generated much more interest than other methods, considerable problems seemed to have been generated from the audio cassettes.

During the training of instructors, 16mm films were used to provide the models from which students could evaluate supervisor-subordinate interactions. Due to production and distribution problems, the films were not available for the field training. In lieu of films, audio cassettes were produced which recorded the sound tracks of the films used during instructor training. Unfortunately, the quality of the audio cassettes was less than adequate. Several instructors reported having to play each cassette twice while others used role-play techniques in lieu of the cassettes. Several instructors felt that more than two interactions would strengthen the ability of this module to develop skills in evaluating interpersonal behaviors.

In addition, it was difficult to observe behavior related to flexibility in the skill practice (role play) situations. Also, none of the six

dimensions of interpersonal skill incorporated aggressive or "take charge behavior" which was elicited to a great extent by the skill practice exercise. To remedy these difficulties, flexibility was deleted from the interpersonal skill dimensions considered in Module IV. Initiative was added as a dimension and defined in the following manner:

Taking action. Influencing events, an individual, or a group rather than passively accepting the circumstances of the situation.

To remedy the problems encountered in Module IV, several modifications were made. First, a series of those audio-visual vignette models of supervisor-subordinate interactions were made. Each portrays a supervisor interviewing a problem employee. The vignettes provide the students an opportunity to practice observing, recording, classifying, and evaluating supervisory behavior as it relates to six dimensions of interpersonal management skill. Since each vignette presents a different supervisor in the same situation with the same employee, the vignettes provide the students with the opportunity to compare contrasting management styles as they are identified through the students' evaluations of each of the three supervisors.

In addition to producing the series of audio-visual vignettes with supporting reports, the following modifications were made based on the results of the evaluations reported above:

1. Module Four

- a. Text material was expanded to include considerations of management styles based on behavior and a series of aids to classifying behavior relative to the dimensions of interpersonal management skill.
- b. Directions to the Behavior Example Exercise were expanded to provide greater clarity.
- c. Instructors' Guide was expanded and modified to accommodate the audio-visual vignettes.

2. Module Two

- a. The length of the Planning and Organizing a Sales Trip Exercise was decreased by deleting the budgetary requirements.
- b. The Organizing the Bicentennial Exercise was modified by combining material on staff members' backgrounds to reduce numbers of separate sections.

3. Miscellaneous

A number of minor changes were made in exercises, text, and instructor material. The changes were primarily to add to the clarity and/or comprehensiveness of the material.

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APPENDIX A

Instructors' Evaluations of Modules

Instructors' Evaluation of Module I
ROTC Management Simulation

Name of Institution

Name of Instructor

Number of Cadets participating in management simulation.

Class MS I II III IV. Circle appropriate class level(s).

Please complete the attached evaluation forms as each segment of the module is completed, there is a form for each segment. When the module is completed return your evaluations and those made by the cadets to:

U.S. Army Research Institute for the
Behavioral and Social Sciences
ATTN: PERI-IL, A.E. Castelnovo
1300 Wilson Blvd.
Arlington, Virginia 22209

Instructor Evaluation of Module I

ROTC Management Simulation

1. Group Fact-Finding Exercise.

a. Difficult or complicated to administer? YES ___ NO ___

If Yes, why? _____

b. Helps develop a useful skill? YES ___ NO ___

If No, why? _____

c. Helps gain a better understanding of cadet's ability? YES ___ NO ___

d. How appropriate in terms of realism and complexity was the exercise for the students?

Extremely appropriate _____

Very appropriate _____

Appropriate _____

Less than appropriate _____

Not appropriate _____

e. Were students able to complete the tasks required by the exercise?

YES ___ NO ___

If No, why? _____

f. How effective was the exercise in attaining its instructional objectives?

Highly effective --

Very effective --

Effective --

Less than effective --

Not effective --

g. About how much time do the cadets need to complete this exercise?

Minutes _____

h. Should this exercise be:

longer? _____

shorter? _____

OK the way it is _____

i. Comments: Please note any changes or additions that would help improve this section _____

2. Registrar's Office Fact-finding Exercise.

- a. Difficult or complicated to administer? YES ___ NO ___
If Yes, why? _____
- b. Helps develop a useful skill? YES ___ NO ___
If No, why? _____
- c. Helps gain a better understanding of cadet's ability? YES ___ NO ___
- d. How appropriate in terms of realism and complexity was the exercise for the students?
Extremely appropriate _____
Very appropriate _____
Appropriate _____
Less than appropriate _____
Not appropriate _____
- e. Were students able to complete the tasks required by the exercise? YES ___ NO ___
If No, why? _____
- f. How effective was the exercise in attaining its instructional objectives?
Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____
- g. About how much time do the cadets need to complete this exercise?
Minutes _____
- h. Should this exercise be:
longer? _____
shorter? _____
OK the way it is _____
- i. Where was this exercise completed?
In class _____
Homework _____
- j. Was the exercise completed:
in groups? _____
individually? _____

k. Where is it more appropriate?

In class _____

Homework _____

l. Comments: Please note any changes or additions that would help improve this section _____

3. Judgment Exercise.

a. Difficult or complicated to administer?

YES ___ NO ___

If Yes, why? _____

b. Helps develop a useful skill?

YES ___ NO ___

If No, why? _____

c. Helps gain a better understanding of cadet's ability?

YES ___ NO ___

d. How appropriate in terms of realism and complexity was the exercise for the students?

Extremely appropriate _____

Very appropriate _____

Appropriate _____

Less than appropriate _____

Not appropriate _____

e. Were students able to complete the tasks required by the exercise?

YES ___ NO ___

If No, why? _____

f. How effective was the exercise in attaining its instructional objectives?

Highly effective _____

Very effective _____

Effective _____

Less than effective _____

Not effective _____

g. About how much time do the cadets need to complete this exercise?

Minutes _____

- h. Should this exercise be:
- longer? _____
- shorter? _____
- OK the way it is _____
- i. Where was this exercise completed?
- In class _____
- Homework _____
- j. Was the exercise completed:
- in groups? _____
- individually? _____
- k. Where is it more appropriate?
- In class _____
- Homework _____
- l. Comments: Please note any changes or additions that would help improve this section _____
- _____
- _____

4. Decisiveness Exercise.

- a. Difficult or complicated to administer? YES ___ NO ___
- If Yes, why? _____
- b. Helps develop a useful skill? YES ___ NO ___
- If No, why? _____
- c. Helps gain a better understanding of cadet's ability? YES ___ NO ___
- d. How appropriate in terms of realism and complexity was the exercise for the students?
- Extremely appropriate _____
- Very appropriate _____
- Appropriate _____
- Less than appropriate _____
- Not appropriate _____
- e. Were students able to complete the tasks required by the exercise? YES ___ NO ___
- If No, why? _____

f. How effective was the exercise in attaining its instructional objectives?

Highly effective

Very effective

Effective

Less than effective

Not effective

—

—

—

—

—

g. About how much time do the cadets need to complete this exercise?

Minutes _____

h. Should this exercise be:

longer?

shorter?

OK the way it is

—

—

—

i. Where was this exercise completed?

In class

Homework

—

—

j. Was the exercise completed:

in groups?

individually?

—

—

k. Where is it more appropriate?

In class

Homework

—

—

l. Comments: Please note any changes or additions that would help improve this section _____

5. Executive Director of the Community Fund Exercise (Part A).

a. Difficult or complicated to administer?

YES ___ NO ___

If Yes, why? _____

b. Helps develop a useful skill?

YES ___ NO ___

If No, why? _____

c. Helps gain a better understanding of cadet's ability?

YES ___ NO ___

- d. How appropriate in terms of realism and complexity was the exercise for the students?

Extremely appropriate _____
Very appropriate _____
Appropriate _____
Less than appropriate _____
Not appropriate _____

- e. Were students able to complete the tasks required by the exercise?

YES ____ NO ____

If No, why? _____

- f. How effective was the exercise in attaining its instructional objectives?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

- g. About how much time do the cadets need to complete this exercise?

Minutes _____

- h. Should this exercise be:

longer? _____
shorter? _____
OK the way it is _____

- i. Where was this exercise completed?

In class _____
Homework _____

- j. Was the exercise completed:

in groups? _____
individually? _____

- k. Where is it more appropriate?

In class _____
Homework _____

- l. Comments: Please note any changes or additions that would help improve this section _____

6. Executive Director of the Community Fund Exercise (Part B).

- a. Difficult or complicated to administer? YES ___ NO ___
If Yes, why? _____
- b. Helps develop a useful skill? YES ___ NO ___
If No, why? _____
- c. Helps gain a better understanding of cadet's ability? YES ___ NO ___
- d. How appropriate in terms of realism and complexity was the exercise for the students?
Extremely appropriate _____
Very appropriate _____
Appropriate _____
Less than appropriate _____
Not appropriate _____
- e. Were students able to complete the tasks required by the exercise? YES ___ NO ___
If No, why? _____
- f. How effective was the exercise in attaining its instructional objectives?
Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____
- g. About how much time do the cadets need to complete this exercise?
Minutes _____
- h. Should this exercise be:
longer? _____
shorter? _____
OK the way it is _____
- i. Where was this exercise completed?
In class _____
Homework _____
- j. Was the exercise completed:
in groups? _____
individually _____

- k. Where is it more appropriate?

In class

—

Homework

—

- l. Comments: Please note any changes or additions that would help improve this section _____

7. Module I Evaluation Summary.

- a. Was the Instructor Guide complete enough for you to effectively conduct the course of instruction?

YES ___ NO ___

If No, why? _____

- b. Did the lecture-text material provide you with sufficient background on problem analysis and decision-making to give the introductory lecture, administer the exercises, and answer questions?

YES ___ NO ___

If No, why? _____

- c. Would the combination of Instructor Guide and Lecture-Text Material be sufficient for an instructor who has had no prior training to implement this module of instruction?

YES ___ NO ___

If No, why? _____

- d. How effective was the text material in providing the students an understanding of problem analysis and decision-making?

Highly effective

—

Very effective

—

Effective

—

Less than effective

—

Not effective

—

- e. How do you compare the mode of instruction used in this module to other methods of instruction in regard to its ability to generate student interest and enthusiasm?

Generates much more interest _____
Generates more interest than most other methods _____
Generates about the same interest as other methods _____
Generates less interest than other methods _____
Generates much less interest than other methods _____

- f. How effective was the module in providing the opportunity for students to develop the skills underlying problem analysis and decision-making?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

- g. Did you enjoy teaching the module? YES ___ NO ___

If No, why? _____

- h. Comments: Please note any changes or additions that would help improve this section _____

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Instructors' Evaluation of Module II
ROTC Management Simulation

Name of Institution

Name of Instructor

Number of Cadets participating in management simulation.

Class MS I II III IV. Circle appropriate class level(s).

Please complete the attached evaluation forms as each segment of the module is completed, there is a form for each segment. When the module is completed return your evaluations and those made by the cadets to:

U.S. Army Research Institute for the
Behavioral and Social Sciences
ATTN: PERI-IL, A.E. Castelnovo
1300 Wilson Blvd.
Arlington, Virginia 22209

Instructor's Evaluation of Module II

ROTC Management Simulation

1. Planning the Bicentennial Exercise.

- a. Difficult or complicated to administer? YES ___ NO ___
If Yes, why? _____
- b. Helps develop a useful skill? YES ___ NO ___
If No, why? _____
- c. Helps gain a better understanding of cadet's ability? YES ___ NO ___
- d. How appropriate in terms of realism and complexity was the exercise for the students?
Extremely appropriate _____
Very appropriate _____
Appropriate _____
Less than appropriate _____
Not appropriate _____
- e. Were students able to complete the tasks required by the exercise: YES ___ NO ___
If No, why? _____
- f. How effective was the exercise in attaining its instructional objectives?
Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____
- g. About how much time do the cadets need to complete this exercise?
Minutes _____
- h. Should this exercise be:
longer? _____
shorter? _____
OK the way it is _____
- i. Where was this exercise completed?
In class _____
Homework _____

- j. Was the exercise completed:
in groups? _____
individually? _____
- k. Where is it more appropriate?
In class _____
Homework _____
- l. Comments: Please note any changes or additions that would help improve this section _____

2. Organizing the Bicentennial Exercise (Part A).

- a. Difficult or complicated to administer? YES ___ NO ___
If Yes, why? _____
- b. Helps develop a useful skill? YES ___ NO ___
If No, why? _____
- c. Helps gain a better understanding of cadet's ability? YES ___ NO ___
- d. How appropriate in terms of realism and complexity was the exercise for the students?
Extremely appropriate _____
Very appropriate _____
Appropriate _____
Less than appropriate _____
Not appropriate _____
- e. Were students able to complete the tasks required by the exercise? YES ___ NO ___
If No, why? _____
- f. How effective was the exercise in attaining its instructional objectives?
Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

g. About how much time do the cadets need to complete this exercise?

Minutes _____

h. Should this exercise be:

longer? _____

shorter? _____

OK the way it is _____

i. Where was this exercise completed?

In class _____

Homework _____

j. Was the exercise completed:

in groups? _____

individually? _____

k. Where is it more appropriate?

In class _____

Homework _____

l. Comments: Please note any changes or additions that would help improve this section _____

3. Organizing the Bicentennial Exercise (Part B).

a. Difficult or complicated to administer?

YES ___ NO ___

If Yes, why? _____

b. Helps develop a useful skill?

YES ___ NO ___

If No, why? _____

c. Helps gain a better understanding of cadet's ability?

YES ___ NO ___

d. How appropriate in terms of realism and complexity was the exercise for the students?

Extremely appropriate _____

Very appropriate _____

Appropriate _____

Less than appropriate _____

Not appropriate _____

- e. Were students able to complete the tasks required by the exercise?

YES ___ NO ___

If No, why? _____

- f. How effective was the exercise in attaining its instructional objectives?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

- g. About how much time do the cadets need to complete this exercise?

Minutes _____

- h. Should this exercise be:

longer? _____
shorter? _____
OK the way it is _____

- i. Where was this exercise completed?

In class _____
Homework _____

- j. Was the exercise completed:

in groups? _____
individually? _____

- k. Where is it more appropriate?

In class _____
Homework _____

- l. Comments: Please note any changes or additions that would help improve this section _____

4. Planning and Organizing a Sales Trip Exercise.

a. Difficult or complicated to administer? YES ___ NO ___

If Yes, why? _____

b. Helps develop a useful skill? YES ___ NO ___

If No, why? _____

c. Helps gain a better understanding of cadet's ability? YES ___ NO ___

d. How appropriate in terms of realism and complexity was the exercise for the students?

Extremely appropriate _____

Very appropriate _____

Appropriate _____

Less than appropriate _____

Not appropriate _____

e. Were students able to complete the tasks required by the exercise?
YES ___ NO ___

If No, why? _____

f. How effective was the exercise in attaining its instructional objectives?

Highly effective _____

Very effective _____

Effective _____

Less than effective _____

Not effective _____

g. About how much time do the cadets need to complete this exercise?
Minutes _____

h. Should this exercise be:
longer? _____
shorter? _____
OK the way it is _____

i. Where was this exercise completed?
In class _____
Homework _____

j. Was the exercise completed?
in groups? _____
individually? _____

k. Where is it more appropriate?

In class

Homework

—

—

l. Comments: Please note any changes or additions that would help improve this section

Module II Evaluation Summary.

- a. Was the Instructor Guide complete enough for you to efficiently conduct the course of instruction?

YES ___ NO ___

If No, Why? _____

- b. Did the lecture-text material provide you with sufficient background on planning and organizing to give the introductory lecture, administer the exercises, and answer questions?

YES ___ NO ___

If No, why? _____

- c. Would the combination of Instructor Guide and Lecture-Text Material be sufficient for an instructor who has had no prior training to implement this module of instruction?

YES ___ NO ___

If No, why? _____

- d. How effective was the text material in providing the students an understanding of planning and organizing?

Highly effective

Very effective

Effective

Less than effective

Not effective

- e. How do you compare the mode of instruction used in this module to other methods of instruction in regard to its ability to generate student interest and enthusiasm?

Generates much more interest

Generates more interest than most other methods

Generates about the same interest as other methods

Generates less interest than other methods

Generates much less interest than other methods

- f. How effective was the module in providing the opportunity for students to develop the skills underlying planning and organizing?

Highly effective

Very effective

Effective

Less than effective

Not effective

g. Did you enjoy teaching the module? YES ☐ NO ☐

If No, why? _____

h. Comments: Please note any changes or additions that would help improve this section _____

Instructors' Evaluation of Module III

ROTC Management Simulation

Name of Institution

Name of Instructor

Number of Cadets participating in management simulation

Class MS I II III IV. Circle appropriate class level(s).

Please complete the attached evaluation forms as each segment of the module is completed, there is a form for each segment. When the module is completed return your evaluations and those made by the cadets to:

U.S. Army Research Institute for the
Behavioral and Social Sciences
ATTN: PERI-IL, A.E. Castelnovo
1300 Wilson Blvd.
Arlington, Virginia 22209

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Instructor Evaluation of Module III

ROTC Management Simulation

1. Delegation Exercise.

- a. Difficult or complicated to administer? YES ___ NO ___
If Yes, why? _____
- b. Helps develop a useful skill? YES ___ NO ___
If No, why? _____
- c. Helps gain a better understanding of cadet's ability? YES ___ NO ___
- d. How appropriate in terms of realism and complexity was the exercise for the students?
Extremely appropriate _____
Very appropriate _____
Appropriate _____
Less than appropriate _____
Not appropriate _____
- e. Were students able to complete the tasks required by the exercise? YES ___ NO ___
If No, why? _____
- f. How effective was the exercise in attaining its instructional objectives?
Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____
- g. About how much time do the cadets need to complete this exercise?
Minutes _____
- h. Should this exercise be:
longer? _____
shorter? _____
OK the way it is _____
- i. Where was this exercise completed?
In class _____
Homework _____
- j. Was the exercise completed:
in groups? _____
individually? _____

k. Where is it more appropriate?

In class

Homework

—

—

l. Comments: Please note any changes or additions that would help improve this section

2. Management Control Exercise.

a. Difficult or complicated to administer?

YES ___ NO ___

If Yes, why?

b. Helps develop a useful skill?

YES ___ NO ___

If No, why?

c. Helps gain a better understanding of cadet's ability?

YES ___ NO ___

d. How appropriate in terms of realism and complexity was the exercise for the students?

Extremely appropriate

—

Very appropriate

—

Appropriate

—

Less than appropriate

—

Not appropriate

—

e. Were students able to complete the tasks required by the exercise?

YES ___ NO ___

If No, why?

f. How effective was the exercise in attaining its instructional objectives?

Highly effective

—

Very effective

—

Effective

—

Less than effective

—

Not effective

—

g. About how much time do the cadets need to complete this exercise?

Minutes _____

- h. Should this exercise be:
- longer? _____
- shorter? _____
- OK the way it is _____
- i. Where was this exercise completed?
- In class _____
- Homework _____
- j. Was the exercise completed:
- in groups? _____
- individually? _____
- k. Where is it more appropriate?
- In class _____
- Homework _____
- l. Comments: Please note any changes or additions that would help improve this section _____
- _____
- _____

3. Plant Manager's In-basket.

- a. Difficult or complicated to administer? YES ___ NO ___
- If Yes, why? _____
- b. Helps develop a useful skill? YES ___ NO ___
- If No, why? _____
- c. Helps gain a better understanding of cadet's ability? YES ___ NO ___
- d. How appropriate in terms of realism and complexity was the exercise for the students?
- Extremely appropriate _____
- Very appropriate _____
- Appropriate _____
- Less than appropriate _____
- Not appropriate _____
- e. Were students able to complete the tasks required by the exercise? YES ___ NO ___
- If No, why? _____

f. How effective was the exercise in attaining its instructional objectives?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

g. About how much time do the cadets need to complete this exercise?

Minutes _____

h. Should this exercise be:

longer? _____
shorter? _____
OK the way it is _____

i. Where was this exercise completed?

In class _____
Homework _____

j. Was the exercise completed:

in groups? _____
individually? _____

k. Where is it more appropriate?

In class _____
Homework _____

l. Comments: Please note any changes or additions that would help improve this section _____

Module III Evaluation Summary.

- a. Was the Instructor Guide complete enough for you to effectively conduct the course of instruction? YES ☐ NO ☐

If No, why? _____

- b. Did the lecture-text material provide you with sufficient background on delegation and control to give the introductory lecture, administer the exercise, and answer questions. YES ☐ NO ☐

If No, why? _____

- c. Would the combination of Instructor Guide and Lecture-Text Material be sufficient for an instructor who has had no prior training to implement this module of instruction? YES ☐ NO ☐

If No, why? _____

- d. How effective was the text material in providing the students an understanding of delegation and control?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

- e. How do you compare the mode of instruction used in this module to other methods of instruction in regard to its ability to generate student interest and enthusiasm?

Generates much more interest _____
Generates more interest than most other methods _____
Generates about the same interest as other methods _____
Generates less interest than other methods _____
Generates much less interest than other methods _____

- f. How effective was the module in providing the opportunity for students to develop the skills underlying delegation and control?

Highly effective

—

Very effective

—

Effective

—

Less than effective

—

Not effective

—

- g. Did you enjoy teaching the module?

YES ___ NO ___

If No, why? _____

- h. Comments: Please note any changes or additions that would help improve this section _____

Instructors' Evaluation of Module IV
ROTC Management Simulation

Name of Institution

Name of Instructor

Number of Cadets participating in management simulation.

Class MS I II III IV. Circle appropriate class level(s).

Please complete the attached evaluation forms as each segment of the module is completed; there is a form for each segment. When the module is completed return your evaluations and those made by the cadets to:

U.S. Army Research Institute for the
Behavioral and Social Sciences
ATTN: PERI-IL, A.E. Castelnovo
1300 Wilson Blvd.
Arlington, Virginia 22209

Instructor Evaluation of Module IV

ROTC Management Simulation

1. Behavioral Example Test.

- a. Difficult or complicated to administer? YES ___ NO ___
If Yes, why? _____
- b. Helps develop a useful skill? YES ___ NO ___
If No, why? _____
- c. How effective was this exercise in helping students distinguish between descriptive behavioral statements and vague judgmental statements?
Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____
- d. About how much time did the cadets need to complete this exercise?
Minutes _____
- e. Comments: Please note any changes or additions that would help improve this exercise _____

2. Using the Audio Cassettes of Supervisor-Subordinate situations and the Model Observer Report Forms.

- a. Difficult or complicated to administer? YES ___ NO ___
If Yes, why? _____
- b. Helps develop a useful skill? YES ___ NO ___
If No, why? _____
- c. Did the two audio cassette models provide adequate opportunity for students to develop their skills in recording behavior? YES ___ NO ___
If No, why? _____

- d. How effective were the audio cassettes and model Observer Reports in developing student skills in recording behavior?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

- e. Comments: Please note any changes or additions that would help improve this exercise _____

3. Behavior Classification Exercise.

- a. Difficult or complicated to administer? YES ___ NO ___

If Yes, why? _____

- b. Helps develop a useful skill? YES ___ NO ___

If No, why? _____

- c. How effective was this exercise in helping students develop skills in classifying behavioral statements according to interpersonal skills?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

- d. About how much time did the cadets need to complete this exercise?

Minutes _____

- e. Comments: Please note any changes or additions that would help improve this exercise _____

4. Observer Evaluation Form.

- a. Are the Observer Evaluation Forms adequate for classifying behavior previously recorded on the Observer Report Form? YES ___ NO ___

If No, why? _____

- b. After completing the Behavior Classification Exercise and studying the two Observer Evaluation Form Model Reports, were the students able to utilize the Behavior Evaluation Form effectively? YES ___ NO ___

If No, why? _____

- c. Comments: Please note any changes or additions to the form that would be helpful _____

5. Interpersonal Skill Practice.

- a. Difficult or complicated to administer? YES ___ NO ___
If Yes, why? _____

- b. Helps develop useful skills? YES ___ NO ___
If No, why? _____

- c. Helps gain a better understanding of cadet's ability? YES ___ NO ___
If No, why? _____

- d. How appropriate in terms of realism and complexity were the interpersonal practices for the cadets?

Extremely appropriate	___
Very appropriate	___
Appropriate	___
Less than appropriate	___
Not appropriate	___

- e. How effectively did the cadets provide appropriate feedback to one another on the interpersonal skills?

Extremely effectively	___
Very effectively	___
Effectively	___
Less than effectively	___
Not effectively	___

- f. Comments: Please note any changes or additions that would help improve this section _____

6. Module IV Evaluation Summary.

- a. Was the Instructor Guide complete enough for you to effectively conduct the course of instruction? YES ☐ NO ☐

If No, why? _____

- b. Would the Instructor Guide be sufficient for an instructor who has had no prior training to implement this module of instruction? YES ☐ NO ☐

If No, why? _____

- c. How effective was this module in providing the opportunity to develop the ability to recognize and evaluate the interpersonal management performance of others, i.e., how well did the cadets learn to observe, record, classify and evaluate the interpersonal skills of other cadets in the interpersonal skill practice session?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

- d. How effective was the module in providing the opportunity to increase the effectiveness of the cadet's interpersonal management skills?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

- e. How do you compare the mode of instruction used in this module to other methods of instruction in regard to its ability to generate student interest and enthusiasm?

Generates much more interest _____
Generates more interest than most other methods _____
Generates about the same amount of interest as other methods _____
Generates less interest than other methods _____
Generates much less interest than other methods _____

f. Did you enjoy teaching the module?

YES ___ NO ___

If No, why? _____

g. Comments: Please note any changes or additions that would help improve this section _____

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A P P E N D I X B

Cadets' Evaluations of Modules

Cadet's Evaluation of Module I
ROTC Management Simulation

This program, which you are about to begin, is in the final stages of completion and being tested by you and your fellow students in practice in the coming class sessions. We are asking your help in shaping this program into an effective and motivating instructional process. We would appreciate getting your reactions to each of the practical management exercises as you experience them by completing the appropriate attached brief evaluation forms soon after you finish each exercise. These will be collected by your instructor when this module is completed, and forwarded to the Army Research Institute where your comments and evaluations will be used to guide construction of the final form of this program. Thank you.

Institution _____

Name _____

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Cadet's Evaluation of Module I
ROTC Management Simulation

1. Group Fact-finding Exercise.

- a. Were the instructions provided by the instructor complete and clear?

Yes ___ No ___

If No, why? _____

- b. Did you understand the nature of the role you were asked to assume in the exercise?

Yes ___ No ___

If No, why? _____

- c. Did you understand the task required of you in this exercise?

Yes ___ No ___

If No, why? _____

- d. Did the resource person provide appropriate information based on the questions asked?

Yes ___ No ___

If No, why? _____

- e. How difficult was it for you to complete the task required in this exercise?

Extremely difficult, much too challenging ___
Very difficult, challenging ___
Difficult, a reasonable challenge ___
Not very difficult, not much of a challenge ___
Easy, no challenge ___

- f. How interesting did you find the exercise?

Extremely interesting ___
Very interesting ___
Interesting ___
Not very interesting ___
Dull ___

- g. As a learning experience, how effective was this exercise in illustrating the complexity of the fact-finding process through questioning?

Highly effective ___
Very effective ___
Effective ___
Less than effective ___
Not effective ___

- h. Comments: Please note any changes or additions you feel would help improve this exercise _____

2. Registrar's Office Fact-finding Exercise

- a. Were the instructions complete and clear?

Yes ___ No ___

If No, why? _____

- b. Did you understand the nature of the role you were asked to assume in the exercise?

Yes ___ No ___

If No, why? _____

- c. Did you understand the task required of you in the exercise?

Yes ___ No ___

If No, why? _____

- d. Were you able to complete the task required in the exercise?

Yes ___ No ___

If No, why? _____

- e. How difficult was it for you to complete the task required in the exercise?

Extremely difficult, much too challenging _____
Very difficult, challenging _____
Difficult, a reasonable challenge _____
Not very difficult, not much of a challenge _____
Easy, no challenge _____

- f. How interesting did you find the exercise?

Extremely interesting _____
Very interesting _____
Interesting _____
Not very interesting _____
Dull _____

- g. As a learning experience, how effective was this exercise in providing you knowledge and/or skills relative to problem analysis?

Highly effective
Very effective
Effective
Less than effective
Not effective

—
—
—
—
—

- h. Is this exercise:

too long?
too short?
about right?

—
—
—

- i. Is this exercise better done:

in class?
as homework?
either?

—
—
—

- j. Comments: Please note any changes or additions you feel would help improve this exercise _____

3. Judgment Exercise.

- a. Were the instructions complete and clear?

Yes ___ No ___

If No, why? _____

- b. Did you understand the nature of the role you were asked to assume in the exercise?

Yes ___ No ___

If No, why? _____

- c. Did you understand the task required of you in the exercise?

Yes ___ No ___

If No, why? _____

- d. Were you able to complete the task required in the exercise?

Yes ___ No ___

If No, why? _____

e. How difficult was it for you to complete the task required in the exercise?

Extremely difficult, much too challenging _____
Very difficult, challenging _____
Difficult, a reasonable challenge _____
Not very difficult, not much of a challenge _____
Easy, no challenge _____

f. How interesting did you find the exercise?

Extremely interesting _____
Very interesting _____
Interesting _____
Not very interesting _____
Dull _____

g. As a learning experience, how effective was this exercise in providing you knowledge and/or skills relative to problem analysis and decision-making?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

h. Is this exercise:

too long? _____
too short? _____
about right? _____

i. Is this exercise better done:

in class? _____
as homework? _____
either? _____

j. Comments: Please note any changes or additions you feel would help improve this exercise _____

4. Decisiveness Exercise.

a. Were the instructions complete and clear?

Yes ___ No ___

If No, why? _____

b. Did you understand the task required of you in the exercise?

Yes ___ No ___

If No, why? _____

c. How difficult was it for you to complete the task required in the exercise?

Extremely difficult, much too challenging _____

Very difficult, challenging _____

Difficult, reasonable challenge _____

Not very difficult, not much of a challenge _____

Easy, no challenge _____

d. How interesting did you find the exercise?

Extremely interesting _____

Very interesting _____

Interesting _____

Not very interesting _____

Dull _____

e. As a learning experience, how effective was this exercise in providing you an understanding of the factors that influence one's decisiveness (readiness to make a decision)?

Highly effective _____

Very effective _____

Effective _____

Less than effective _____

Not effective _____

f. Is this exercise:

too long? _____

too short? _____

about right? _____

g. Is this exercise better done:

in class? _____

as homework? _____

either? _____

- h. Comments: Please note any changes or additions you feel would help improve this exercise _____

5. Executive Director of the Community Fund Exercise (Part A).

- a. Were the instructions complete and clear?

Yes ___ No ___

If No, why? _____

- b. Did you understand the nature of the role you were asked to assume in the exercise?

Yes ___ No ___

If No, why? _____

- c. Did you understand the task required of you in the exercise?

Yes ___ No ___

If No, why? _____

- d. Were you able to complete the task required in the exercise?

Yes ___ No ___

If No, why? _____

- e. How difficult was it for you to complete the task required in the exercise?

Extremely difficult, much too challenging _____
Very difficult, challenging _____
Difficult, reasonable challenge _____
Not very difficult, not much of a challenge _____
Easy, no challenge _____

- f. How interesting did you find the exercise?

Extremely interesting _____
Very interesting _____
Interesting _____
Not very interesting _____
Dull _____

- g. As a learning experience, how effective was this exercise in providing you knowledge and/or skills relative to problem analysis and decision-making?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

- h. Is this exercise:

too long? _____
too short? _____
about right? _____

- i. Is this exercise better done:

in class? _____
as homework? _____
either? _____

- j. Comments: Please note any changes or additions you feel would help improve this exercise _____

6. Executive Director of the Community Fund Exercise (Part B)

- a. Were the instructions complete and clear?

Yes ___ No ___

If No, why? _____

- b. Did you understand the nature of the role you were asked to assume in the exercise?

Yes ___ No ___

If No, why? _____

- c. Did you understand the task required of you in the exercise?

Yes ___ No ___

If No, why? _____

- d. Were you able to complete the task required in the exercise?

Yes ___ No ___

If No, why? _____

e. How difficult was it for you to complete the task required in the exercise?

- Extremely difficult, much too challenging —
- Very difficult, challenging —
- Difficult, reasonable challenge —
- Not very difficult, not much of a challenge —
- Easy, no challenge —

f. How interesting did you find the exercise?

- Extremely interesting —
- Very interesting —
- Interesting —
- Not very interesting —
- Dull —

g. As a learning experience, how effective was this exercise in providing you knowledge and/or skills relative to problem analysis and decision-making?

- Highly effective —
- Very effective —
- Effective —
- Less than effective —
- Not effective —

h. Is this exercise:

- too long? —
- too short? —
- about right? —

i. Is this exercise better done:

- in class? —
- as homework? —
- either? —

j. Comments: Please note any changes or additions you feel would help improve this exercise _____

7. Summary Evaluation for Module I.

- a. How effective do you feel this block of instruction was in providing you with skills to successfully implement the essential elements of problem analysis and decision-making?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

- b. How does the mode of instruction used in this module compare to the other instructional methods you have encountered as a student in regard to ability to generate interest?

Much more interesting than other methods _____
More interesting than other methods _____
Generates about the same interest as other methods _____
Generates less interest than other methods _____
Much less interesting than other methods _____

- c. How strongly would you recommend this module to other students (both ROTC cadets and other students)?

Highly recommend _____
Recommend _____
Not recommend _____

- d. Did you find the text material for this module clear and complete?

Yes _____ No _____

If No, why? _____

- e. How effective was the text material in providing you an understanding of problem analysis and decision-making and the essential elements that underlie these management concepts?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

- f. Summary Evaluation: Please make a summary evaluation of the module indicating the strengths you see in them and note any changes or additions you feel would improve the total module.

Cadet's Evaluation of Module II
ROTC Management Simulation

This program, which you are about to begin, is in the final stages of completion and being tested by you and your fellow students in practice in the coming class sessions. We are asking your help in shaping this program into an effective and motivating instructional process. We would appreciate getting your reactions to each of the practical management exercises as you experience them by completing the appropriate attached brief evaluation forms soon after you finish each exercise. These will be collected by your instructor when this module is completed, and forwarded to the Army Research Institute where your comments and evaluations will be used to guide construction of the final form of this program. Thank you.

Institution _____

Name _____

Cadet's Evaluation of Module II
ROTC Management Simulation

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1. Planning the Bicentennial Exercise.

- a. Were the instructions complete and clear?

YES _____ NO _____

If No, why? _____

- b. Did you understand the nature of the role you were asked to assume in the exercise?

YES _____ NO _____

If No, why? _____

- c. Did you understand the task required of you in the exercise?

YES _____ NO _____

If No, why? _____

- d. Were you able to complete the task required in the exercise?

YES _____ NO _____

If No, why? _____

- e. How difficult was it for you to complete the task required in the exercise?

Extremely difficult, much too challenging _____

Very difficult, challenging _____

Difficult, a reasonable challenge _____

Not very difficult, not much of a challenge _____

Easy, no challenge _____

- f. How interesting did you find the exercise?

Extremely interesting _____

Very interesting _____

Interesting _____

Not very interesting _____

Dull _____

- g. As a learning experience, how effective was this exercise in providing you knowledge and/or skills relative to the targeted essential elements in the instructions?

Highly effective _____

Very effective _____

Effective _____

Less than effective _____

Not effective _____

- h. Is this exercise:

too long? _____

too short? _____

about right? _____

- i. Is this exercise better done:

in class? _____

as homework? _____

either? _____

- j. Comments: Please note any changes or additions you feel would help improve this exercise _____

2. Organizaing the Bicentennial Exercise

- a. Were the instructions complete and clear?

YES _____ NO _____

If No, why? _____

- b. Did you understand the nature of the role you were asked to assume in the exercise?

YES _____ NO _____

If No, why? _____

c. Did you understand the task required of you in the exercise?

YES _____ NO _____

If No, why? _____

d. Were you able to complete the task required in the exercise?

YES _____ NO _____

e. How difficult was it for you to complete the task required in the exercise?

Extremely difficult, much too challenging _____

Very difficult, challenging _____

Difficult, a reasonable challenge _____

Not very difficult, not much of a challenge _____

Easy, no challenge _____

f. How interesting did you find the exercise?

Extremely interesting _____

Very interesting _____

Interesting _____

Not very interesting _____

Dull _____

g. As a learning experience, how effective was this exercise in providing you knowledge and/or skills relative to the targeted essential elements in the instructions?

Highly effective _____

Very effective _____

Effective _____

Less than effective _____

Not effective _____

h. Is this exercise:

too long? _____

too short? _____

about right? _____

i. Is this exercise better done:

in class? _____

as homework? _____

either? _____

j. Comments: Please note any changes or additions you feel would help improve this exercise _____

3. Planning and Organizing a Sales Trip Exercise

a. Were the instructions complete and clear?

YES _____ NO _____

If No, why? _____

b. Did you understand the nature of the role you were asked to assume in the exercise?

YES _____ NO _____

If No, why? _____

c. Did you understand the task required of you in the exercise?

YES _____ NO _____

If No, why? _____

d. Were you able to complete the task required in the exercise?

YES _____ NO _____

If No, why? _____

e. How difficult was it for you to complete the task required in the exercise?

Extremely difficult, much too challenging _____

Very difficult, challenging _____

Difficult, a reasonable challenge _____

Not very difficult, not much of a challenge _____

Easy, no challenge _____

f. How interesting did you find the exercise?

Extremely interesting

Very interesting

Interesting

Not very interesting

Dull

g. As a learning experience, how effective was this exercise in providing you knowledge and/or skills relative to the targeted essential elements in the instructions?

Highly effective

Very effective

Effective

Less than effective

Not effective

h. Is this exercise:

too long?

too short?

about right?

i. Is this exercise better done:

in class?

as homework?

either?

j. Comments: Please note any changes or additions you feel would help improve this exercise _____

Summary Evaluation for Module II

- a. How effective do you feel this block of instruction was in providing you with skills to successfully implement the essential elements of planning and organizing?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

- b. How does the mode of instruction used in this module compare to the other instructional methods you have encountered as a student in regard to ability to generate interest?

Much more interesting than other methods _____
More interesting than other methods _____
Generates about the same interest as other methods _____
Generates less interest than other methods _____
Much less interest than other methods _____

- c. How strongly would you recommend this module to other students (both ROTC cadets and other students)?

Highly recommend _____
Recommend _____
Not recommend _____

- d. Did you find the text material for this module clear and complete?

YES _____ NO _____

If No, why? _____

- e. How effective was the text material in providing you an understanding of planning and organizing and the essential elements that underlie these management concepts?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

- f. Summary Evaluation: Please make a summary evaluation of the module indicating the strengths you see in them and note any changes or additions you feel would improve the total module.

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Cadet's Evaluation of Module III
ROTC Management Simulation

This program, which you are about to begin, is in the final stages of completion and being tested by you and your fellow students in practice in the coming class sessions. We are asking your help in shaping this program into an effective and motivating instructional process. We would appreciate getting your reactions to each of the practical management exercises as you experience them by completing the appropriate attached brief evaluation forms soon after you finish each exercise. These will be collected by your instructor when this module is completed, and forwarded to the Army Research Institute where your comments and evaluations will be used to guide construction of the final form of this program. Thank you.

Institution _____

Name _____

Cadet's Evaluation of Module III
ROTC Management Simulation

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1. Delegation Exercise

a. Were the instructions complete and clear?

YES _____ NO _____

If No, why? _____

b. Did you understand the nature of the role you were asked to assume in the exercise?

YES _____ NO _____

If No, why? _____

c. Did you understand the task required of you in the exercise?

YES _____ NO _____

If No, why? _____

d. Were you able to complete the task required in the center?

YES _____ NO _____

If No, why? _____

e. How difficult was it for you to complete the task required in the exercise?

Extremely difficult, much too challenging _____

Very difficult, challenging _____

Difficult, a reasonable challenge _____

Not very difficult, not much of a challenge _____

Easy, no challenge _____

f. How interesting did you find the exercise?

Extremely interesting _____

Very interesting _____

Interesting _____

Not very interesting _____

Dull _____

- g. As a learning experience, how effective was this exercise in providing you knowledge and/or skills relative to the targeted essential elements in the instructions?

Highly effective

Very effective

Effective

Less than effective

Not effective

- h. Is this exercise:

too long?

too short?

about right?

- i. Is this exercise better done:

in class?

as homework?

either?

- j. Comments: Please note any changes or additions you feel would help improve this exercise _____

2. Management Control Exercise

- a. Were the instructions complete and clear?

YES _____ NO _____

If No, why? _____

- b. Did you understand the nature of the role you were asked to assume in the exercise?

YES _____ NO _____

If No, why? _____

c. Did you understand the task required of you in the exercise?

YES _____ NO _____

If No, why? _____

d. Were you able to complete the task required in the exercise?

YES _____ NO _____

If No, why? _____

e. How difficult was it for you to complete the task required in the exercise?

Extremely difficult, much too challenging _____

Very difficult, challenging _____

Difficult, a reasonable challenge _____

Not very difficult, not much of a challenge _____

Easy, no challenge _____

f. How interesting did you find the exercise?

Extremely interesting _____

Very interesting _____

Interesting _____

Not very interesting _____

Dull _____

g. As a learning experience, how effective was this exercise in providing you with an understanding of the four types of management control?

Highly effective _____

Very effective _____

Effective _____

Less than effective _____

Not effective _____

h. Is this exercise:

too long? _____

too short? _____

about right? _____

i. Is this exercise better done:

in class? _____

as homework? _____

either? _____

j. Comments: Please note any changes or additions you feel would help improve this exercise _____

3. Plant Manager's In-basket

a. Were the instructions complete and clear?

YES _____ NO _____

If No, why? _____

b. Did you understand the nature of the role you were asked to assume in the exercise?

YES _____ NO _____

If No, why? _____

c. Did you understand the task required of you in the exercise?

YES _____ NO _____

If No, why? _____

d. Were you able to complete the task required in the exercise?

YES _____ NO _____

If No, why? _____

e. How difficult was it for you to complete the task required in the exercise?

Extremely difficult, much too challenging _____

Very difficult, challenging _____

Difficult, a reasonable challenge _____

Not very difficult, not much of a challenge _____

Easy, no challenge _____

f. How interesting did you find the exercise?

Extremely interesting	_____
Very interesting	_____
Interesting	_____
Not very interesting	_____
Dull	_____

g. As a learning experience, how effective was this exercise in providing you knowledge and/or skills relative to the essential elements of delegation and the four types of management control?

Highly effective	_____
Very effective	_____
Effective	_____
Less than effective	_____
Not effective	_____

h. Is this exercise:

too long?	_____
too short?	_____
about right?	_____

i. Is this exercise better done:

in class?	_____
as homework?	_____
either?	_____

j. Comments: Please note any change or additions you feel would help improve this exercise _____

Summary Evaluation for Module III

- a. How effective do you feel this block of instruction was in providing you with skills to successfully implement the essential elements of delegation and control?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

- b. How does the mode of instruction used in this module compare to the other instructional methods you have encountered as a student in regard to ability to generate interest?

Much more interesting than other methods _____
More interesting than other methods _____
Generates about the same interest as other methods _____
Generates less interest than other methods _____
Much less interesting than other methods _____

- c. How strongly would you recommend this module to other students (both ROTC cadets and other students)?

Highly recommend _____
Recommend _____
Not recommend _____

- d. Did you find the text material for this module clear and complete?

YES _____ NO _____

If No, why? _____

- e. How effective was the text material in providing you an understanding of delegation and control and the essential elements that underlie these management concepts?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

- f. Summary Evaluation: Please make a summary evaluation of the module indicating the strengths you see in them and note any changes or additions you feel would improve the total module.

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Cadet's Evaluation of Module IV
ROTC Management Simulation

This program, which you are about to begin, is in the final states of completion and being tested by you and your fellow students in practice in the coming class sessions. We are asking your help in shaping this program into an effective and motivating instructional process. We would appreciate getting your reactions to each of the practical management exercises as you experience them by completing the appropriate attached brief evaluation forms soon after you finish each exercise. These will be collected by your instructor when this module is completed, and forwarded to the Army Research Institute where your comments and evaluations will be used to guide construction of the final form of this program. Thank you.

Institution _____

Name _____

Cadet's Evaluation of Module IV
ROTC Management Simulation

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1. Behavioral Example Exercise.

a. Were the instructions complete and clear? YES _____ NO _____

If No, why? _____

b. Did you understand the task required of you in the exercise?

YES _____ NO _____

If No, why? _____

c. How difficult was it for you to complete the task required in the exercise?

Extremely difficult _____
Very difficult _____
Difficult _____
Not very difficult _____
Easy _____

d. How effective was this exercise in helping you distinguish between behaviorally based statements and vague judgmental statements?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

e. Comments: Please note any changes or additions you feel would help improve this exercise _____

2. Using the Audio Cassettes of Supervisor-Subordinate situations and the Model Observer Report Forms.

a. Did you understand the task required of you as you listened to the tapes?

YES _____ NO _____

If No, why? _____

- b. How difficult for you was it to complete the Observer Report Form while listening to the second cassette?

Extremely difficult _____
Very difficult _____
Difficult _____
Not very difficult _____
Easy _____

- c. Based on a comparison of the Observer Report Form you completed during the second cassette and the model report for that cassette, how effectively do you believe you recorded behavior?

Highly effectively _____
Very effectively _____
Effectively _____
Less than effectively _____
Not effectively _____

- d. Comments: Please note any changes or additions you feel would help improve this part of Module IV _____

3. Behavior Classification Exercise.

- a. Did you understand the task required in the exercise?

YES ____ NO ____

If No, why? _____

- b. How difficult was it for you to complete the task required in the exercise?

Extremely difficult _____
Very difficult _____
Difficult _____
Not very difficult _____
Easy _____

- c. How effective was this exercise in helping you develop skills in classifying behavioral statements according to interpersonal skills?

Highly effective _____
Very effective _____
Effective _____
Less than effective _____
Not effective _____

- d. Comments: Please note any changes or additions you feel would help improve this exercise _____

4. Interpersonal Skill Practices.

- a. Did you understand the nature of your role when you were required to play the role of the Plant Manager? YES ___ NO ___

If No, why? _____

- b. Did you understand the nature of your role when you were required to play the role of one of the Plant Manager's subordinates? YES ___ NO ___

If No, why? _____

- c. When you were in the role of the Plant Manager, did you understand the task required of you? YES ___ NO ___

If No, why? _____

- d. How difficult was it for you to complete the task required of you as the Plant Manager?

Extremely difficult _____

Very difficult _____

Difficult _____

Not very difficult _____

Easy _____

- e. Was the feedback provided you on the interpersonal skills you exhibited while playing the role of the Plant Manager accurate? YES ___ NO ___

If No, why? _____

Beneficial? _____

YES ___ NO ___

If No, why? _____

- f. When you were required to observe, record, classify and evaluate the behavior of one of your classmates who was playing the role of the Plant Manager, how effectively do you believe you were able to provide accurate feedback?

Highly effectively _____

Very effectively _____

Effectively _____

Less than effectively _____

Not effectively _____

- g. Comments: Please note any changes or additions you feel would help improve the interpersonal skill practice exercise _____
- _____
- _____

Summary Evaluation of Module IV.

- a. How effective do you believe this module was in providing you the opportunity to develop the ability to recognize and evaluate the interpersonal management performance of others?

Highly effective	—
Very effective	—
Effective	—
Less than effective	—
Not effective	—

- b. How effective was the module in providing the opportunity to increase the effectiveness of your interpersonal management skills?

Highly effective	—
Very effective	—
Effective	—
Less than effective	—
Not effective	—

- c. How interesting did you find this module?

Extremely interesting	—
Very interesting	—
Interesting	—
Less than interesting	—
Dull	—

- d. How strongly would you recommend this module to other students both ROTC cadets and others?

Highly recommend	—
Recommend	—
Not recommend	—

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- e. Summary Evaluation: Please make a summary evaluation of the module indicating the strengths you see in it and note any changes or additions you feel would improve the total module.

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APPENDIX C

Results of Field Testing

APPENDIX C
Table 1
Results of Field Testing

	Cadet Effectiveness Measures For Exercises			Instructor Effectiveness Measures For Exercises			
	Interesting (Mean)	Effective (Mean)	Other	Effective (Mean)	Develops Skill (% Yes)	Develops Understanding (% Yes)	Other
Module I							
1. Group Fact Finding	3.51	3.69	---	4.36	100.0	90.9	---
2. Registrar Fact Finding	3.43	3.47	---	4.36	100.0	100.0	---
3. Judgment	3.44	3.40	---	4.36	100.0	100.0	---
4. Decisiveness	3.65	3.42	---	4.30	100.0	100.0	---
5. Community Fund (A)	3.65	3.56	---	4.09	100.0	100.0	---
6. Community Fund (B)	3.40	3.31	---	3.82	90.0	88.9	---
Module II							
1. Planning Bicentennial	3.39	3.44	---	4.40	100.0	100.0	---
2. Organizing Bicentennial (A)	3.29	3.38	---	4.10	100.0	100.0	---
3. Organizing Bicentennial (B)	--	--	---	4.29	71.4	100.0	---
4. Sales Trip	3.32	3.51	---	3.73	90.0	100.0	---
Module III							
1. Delegation	3.54	3.55	---	4.36	100.0	100.0	---
2. Management Control	3.44	3.35	---	4.36	100.0	100.0	---
3. Plant Manager's In-Basket	3.55	3.51	---	4.70	100.0	100.0	---
Module IV							
1. Behavioral Example	--	3.22	---	3.50	81.8	---	---
2. Using Cassettes and Forms	--	--	2.57 ¹	2.20	57.1	---	25.0 ²
3. Behavioral Classification	--	3.33	---	3.50	90.0	---	---
4. Observer Evaluation Form	--	--	---	--	---	---	88.9 ³
5. Interpersonal Skills	--	3.46 ⁴	100.0 ⁵	--	100.0	90.0	4.36 ⁷

- ¹Effectiveness of recording behavior (mean)
²Adequate opportunity to develop skills recording behavior (% Yes)
³Students able to utilize form effectively (% Yes)
⁴How effectively able to provide feedback
⁵Feedback accurate (% Yes)
⁶Feedback beneficial (% Yes)
⁷How effectively students provided feedback

Table 1 (continued)
Results of Field Testing

	Student Materials			Instructor Materials		Students	Instructors
	Inst's Comp., C/r (% Yes)	Undrst Role (% Yes)	Undrst Task (% Yes)	Diff., Compl. to admin'str (%. Yes)	Other	How Difficult (Mean)	How appropriate in realism, complexity (Mean)
Module I							
1. Group Fact Finding	100.0	100.0	98.1	9.1	98.1 ¹	3.00	4.36
2. Registrar Fact Finding	100.0	100.0	100.0	18.2	--	3.11	4.36
3. Judgment	100.0	100.0	100.0	9.1	--	2.94	4.36
4. Decisiveness	98.2	---	100.0	9.1	--	2.96	4.36
5. Community Fund (A)	100.0	100.0	100.0	9.1	--	3.30	4.00
6. Community Fund (B)	98.2	100.0	98.2	9.1	--	3.02	3.91
Module II							
1. Planning Bicentennial	98.2	98.2	96.4	0.0	--	3.28	4.30
2. Organizing Bicentennial (A)	100.0	100.0	100.0	10.0	--	3.15	4.30
3. Organizing Bicentennial (B)	---	---	---	0.0	--	--	4.00
4. Sales Trip	96.2	98.1	98.1	0.0	--	3.70	3.82
Module III							
1. Delegation	98.2	100.0	100.0	0.0	--	2.91	4.55
2. Management Control	92.7	100.0	98.2	0.0	--	3.02	4.27
3. Plant Manager's In-basket	87.0	96.3	92.7	0.0	--	3.45	4.60
Module IV							
1. Behavioral Example	84.0	---	84.0	18.2	--	2.86	--
2. Using Cassettes and Forms	---	---	57.4	80.0	--	3.59	--
3. Behavioral Classification	---	---	95.8 ²	9.1	--	3.08	--
4. Observer Evaluation Form	---	---	88.9 ²	--	100.0 ³	--	--
5. Interpersonal Skills	---	90.9 ⁴	93.0 ⁶	18.2	--	2.80 ⁷	4.50
		95.6 ⁵					

- ¹Resource person provided appropriate information (% Yes - Students)
²Student's able to use Beh. Eval. Form (% Yes - Instructors)
³Forms adequate for class'y behavior (% Yes - Instructors)
⁴Role as plant manager
⁵Role as subordinate
⁶Task as plant manager
⁷How difficult to complete task as plant manager

Table 1 (continued)
Results of Field Testing

	Preferred Teaching Techniques					Groups or Individuals
	Class or Homework		Instructor's Choice		Instructor's Use	
	Cadet's Prefer	Instructor's Choice	(% Favor Class)	(% Used Class)	(% Used Groups)	
	Class (%)	Homework (%)	Either (%)			
Module I						
1. Group Fact Finding	--	--	--	--	--	--
2. Registrar Fact Finding	71.7	18.9	9.4	81.8	81.8	72.7
3. Judgment	59.3	25.9	14.8	36.4	36.4	30.0
4. Decisiveness	57.4	22.2	20.4	63.6	54.5	10.0
5. Community Fund (A)	58.0	32.0	10.0	36.4	33.3	45.5
6. Community Fund (B)	51.9	29.6	18.5	50.0	54.5	40.9
Module II						
1. Planning Bicentennial	48.1	40.7	11.1	50.0	55.0	50.0
2. Organizing Bicentennial (A)	38.2	43.6	18.2	75.0	55.0	65.0
3. Organizing Bicentennial (B)	--	--	--	50.0	57.1	57.1
4. Sales Trip	3.56	45.2	19.2	30.0	18.2	4.5
Module III						
1. Delegation	50.0	23.1	26.9	54.5	54.5	11.1
2. Management Control	48.1	21.2	30.8	54.5	50.0	9.1
3. Plant Manager's In-Basket	31.5	44.4	24.1	30.0	30.0	0.0
Module IV						
1. Behavioral Example	--	--	--	--	--	--
2. Using Cassettes and Forms	--	--	--	--	--	--
3. Behavioral Classification	--	--	--	--	--	--
4. Observer Evaluation Form	--	--	--	--	--	--
5. Interpersonal Skills	--	--	--	--	--	--

Table 1 (continued)
Results of Field Testing

Instructor Evaluation of Modules' Effectiveness					
	How Effective: Understanding (Mean)	How Much Interest (Mean)	How Effective: Developing Skills (Mean)	Enjoy Teaching (% Yes)	How Effective: Providing Opportunity Evaluate Others (Mean)
Module I	4.55	4.80	4.45	100.0	--
Module II	4.40	4.45	4.32	81.8	--
Module III	4.73	4.45	4.64	100.0	--
Module IV	--	4.60	4.30	88.9	4.00

Evaluation of Instructor Materials by Module

	(% Yes) Inst. Guide Comp. Enough	(% Yes) Lect. Text Enough Backg'd	(% Yes) Comb'n Suff't for Untrained Inst.	(% Yes) Instr. Guide Suff't for Untrained Inst.
Module I	81.8	100.0	72.7	--
Module II	100.0	95.0	66.7	--
Module III	100.0	100.0	81.8	--
Module IV	100.0	---	--	75.0

Cadet Evaluation Of Modules

	How Effective: Skills (Mean)	How Much Interest (Mean)	How Strongly Recommend (Mean)	How Effective: Understanding (Mean)	How Effective: Eval. Others (Mean)	Text Material Clear, Comp. (% Yes)
Module I	3.62	4.13	2.55	3.76	--	100.0
Module II	3.42	3.76	2.30	3.43	--	86.8
Module III	3.73	4.06 ¹	2.45	--	--	92.0
Module IV	3.52	3.50 ¹	2.24	--	3.46	--

¹How Interesting (question differed from that asked in Modules I - III)

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