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TRAINING ANALYSIS AND EVALUATION GROUP

TECHNICAL REPORT 145

INSERVICE TRAINING NEEDS OF INSTRUCTORS AND TRAINING MANAGERS

MAY 1983

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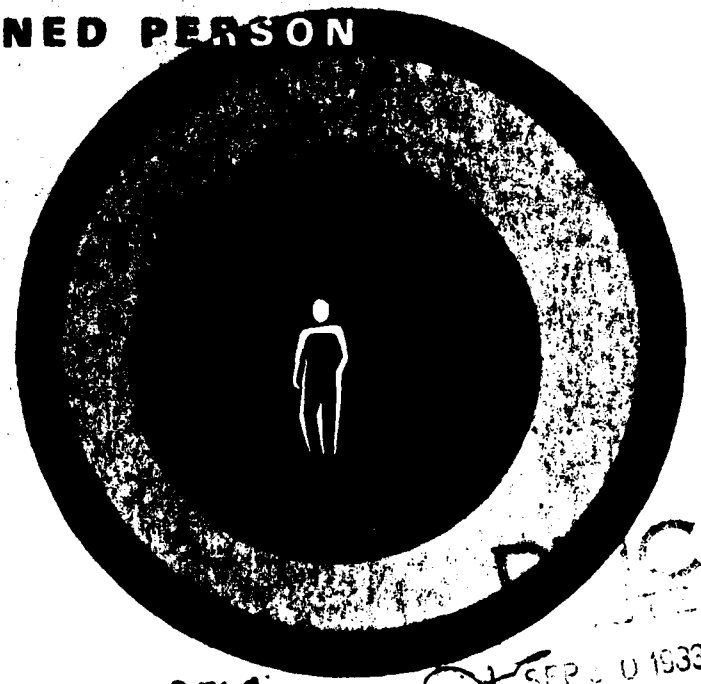

TRAINING ANALYSIS AND EVALUATION GROUP
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Technical Report 145

INSERVICE TRAINING NEEDS OF INSTRUCTORS AND TRAINING MANAGERS

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Schools within the Naval Education and Training Command (NAVEDTRACOM) provide inservice training (IST) to enhance and maintain personnel skills and knowledge necessary for the efficient and effective management and delivery of training. Currently, IST is most often designed at the local level to meet the needs of a specific activity. Thus, IST varies in content and emphasis across NAVEDTRACOM activities.

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20. ABSTRACT (continued)

The Chief of Naval Education and Training (CNET) tasked the TAEG to assess IST needs on a command-wide basis rather than for individual training activities. The CNET will use the information developed by TAEG to plan for the acquisition of needed training materials to support training activities in carrying out their IST functions.

This study assessed the IST needs of personnel assigned to CNET training activities and developed a prioritized listing(s) of command-wide inservice needs.

Four groups of training activity personnel were identified as potential candidates for IST:

- Curriculum and Instruction Standards Office (CISO) personnel;
- Training Executives (i.e., commanding officers, executive officers, and directors of training);
- Training Managers (i.e., training department heads, school/course heads, and instructor supervisors); and
- Instructors.

This report documents inservice requirements for the instructor and the training manager groups. A companion report (Ford and Hall, 1983) delineates the needs of the other two personnel groups.

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SECTION I

INTRODUCTION

The Chief of Naval Education and Training (CNET) requires that subordinate schools provide inservice training (IST) to assigned personnel. The general intent of IST is to enhance and maintain personnel skills and knowledge necessary for the efficient and effective development, management, and delivery of training. Currently, IST is most often designed at the local level to meet needs at a specific activity. Systematic attempts to identify and contend with inservice needs across the Naval Education and Training Command (NAVEDTRACOM) have been lacking.

CNET tasked the Training Analysis and Evaluation Group (TAEG) to assess IST needs, on a command-wide basis, for personnel assigned to training activities.[1] The information developed by TAEG will be used by CNET to plan for the acquisition of training materials needed to support IST.

PURPOSE OF THIS STUDY

The purpose of this study was to (1) assess the inservice training needs of personnel assigned to CNET training activities and (2) develop a prioritized listing(s) of command-wide inservice needs for CNET attention.

Four groups of training activity personnel were identified by TAEG as potential candidates for inservice training:

- Curriculum and Instruction Standards Office (CISO) personnel
- Training Executives (i.e., commanding officers, executive officers, and directors of training)
- Training Managers (i.e., training department heads, school/course heads, and instructor supervisors)
- Instructors.

A previous TAEG technical report (Ford and Hall, 1983) documented inservice requirements for CISO personnel and training executives. The present report delineates the inservice needs of instructors and training managers.

[1]CNET ltr Code 022 of 25 Sep 1981.

SECTION II

THE INSERVICE CONCEPT

This section addresses the concept of inservice training. Certain general considerations relevant to the concept are presented, followed by a brief description of current inservice requirements.

GENERAL CONSIDERATIONS

IST is formal training that individuals receive after reporting for duty at a training activity. The training is formal if it has a curriculum, objectives to be achieved, and criteria for success or failure. Inservice training is distinguished from on-the-job training in that it occurs during periods when individuals are not involved in the performance of their normal job duties.

Most inservice training assumes that assigned personnel are at least basically qualified for the positions they occupy. Thus, the purpose of IST, generally, is to enhance and/or maintain the skills of currently qualified personnel rather than to impart basic skills to previously unqualified personnel. There are at least three applications for which IST is appropriate. These are refresher training, training in new procedures and techniques and training in specialized procedures and techniques. For these purposes, IST is likely to be more desirable than sending personnel to a centralized school. A centralized approach would require more time and money and would also remove qualified personnel from their duty stations. One of the advantages of IST is that personnel being trained are still available to the activity to perform their duties. Despite its advantages, however, it is not the optimal mode for all kinds of training. For lengthy programs in particular, centralized training may have advantages such as requiring fewer personnel to conduct and maintain programs. It may also permit more efficient use of equipment and facilities. Further discussion of selecting IST or centralized training is beyond the scope of this report. However, the point is that IST is desirable for some kinds of training and undesirable for others.

CURRENT INSERVICE REQUIREMENTS

Official publications of the CNET and the Chief of Naval Technical Training (CNTECHTRA) refer to inservice training.

The Procedures for Instructional Systems Development (NAVEDTRA 110A) provides guidance for the analysis, design, development, implementation, and control of instructional programs under CNET cognizance. The need for inservice training is recognized with the following statement:

> **INSERVICE TRAINING.** All activities will provide a formal inservice training program monthly for instructional and supervisory personnel.

CNET Instruction 1540.6A (1982) delegates to training activity Curriculum and Instruction Standards Offices (CISO) the responsibility for maintaining the quality of local technical training through instructor and staff inservice training programs.

CNTECHTRA Instruction 1540.47 (1979) provides "policy and guidance for the conduct of an instructor/staff inservice training program" for training activities under CNTECHTRA cognizance. Several guidelines are provided. First, inservice should be "formal, scheduled, and periodically evaluated." The purpose of inservice training is to correct deficiencies and provide for professional growth. Inservice programs should be developed with the guidance of the CISO. Also, not only are instructors to be given inservice training, but so should staff and supervisory personnel. The instruction states that needs for specific inservice training can be determined by internal evaluation and day-to-day supervision.

The documents cited above establish a formal requirement for IST to be conducted at training activities. The content is, however, largely left to the discretion of each local activity. Currently, there is a lack of information concerning inservice needs across the NAVEDTRACOM. The present study was designed to assess these needs. The technical approach taken is described in the next section of this report.

SECTION III

TECHNICAL APPROACH

This section presents the technical approach used to assess inservice training needs of NAVEDTRACOM instructors and training managers. The procedural steps consisted of project planning and coordination, questionnaire development, designing study samples, data collection and data analysis. Each of these steps is discussed below.

PROJECT PLANNING AND COORDINATION

At the beginning of the project, planning and coordination meetings were held with selected training activity personnel and with CNET and CNTECHTRA staff.

Open-ended interviews were conducted with training activity personnel to obtain information concerning the:

- functions performed at the activity by various personnel groups
- existence and success of formal IST programs at that activity
- target populations of those programs
- responsibility for the design, delivery, and evaluation of inservice programs
- inservice needs of assigned staff.

Information obtained from these interviews was used in project planning to delimit the inservice training study and to develop the data collection instruments.

During individual meetings with CNET and CNTECHTRA staff personnel, various inputs to the program were received. At CNTECHTRA, a general staff briefing was provided by the TAEG project team. Subsequently, open-ended interviews were conducted with groups of Training Program Coordinators (TPC). At these sessions, TPCs provided inputs concerning the adequacy of function lists generated through interviews with training activity personnel and/or extracted from other sources. The TPCs also assisted the TAEG project staff in selecting a representative sample of training activities from which data would be collected.

To ensure maximum participation in the study by personnel at the training activities of interest, CNET transmitted letters to the CNET functional commanders and to the Naval Education and Training Center requesting support for the study.[2] The functional commanders, in turn, requested maximum participation from their subordinate activities.

[2]CNET ltr Code 00A2 of 8 Feb 1982.

QUESTIONNAIRE DEVELOPMENT

To minimize project costs, the TAEG chose questionnaires as a means for gathering data. The first step in developing appropriate forms was to identify the functions performed by instructors and training managers. An instructor job task inventory (JTI), prepared by the Naval Education and Training Support Center, Atlantic, was the principal source used for function identification. Other more general sources were also used. The lists of instructor and training manager functions were reviewed by personnel knowledgeable of training activity operations (e.g., CNTECHTRA TPCs and education specialists). Subsequently, response options and questions about the functions were developed. Copies of the questionnaires are contained in appendix A.

The resulting instructor questionnaire contained two sections; the training manager questionnaire contained three sections. The first section of both questionnaires asked about the respondents' educational and work backgrounds; the second section was concerned with their specific job functions. For each specific job function, six questions were asked:

- On the average, how often do you perform this function?
- How difficult is it for you to perform this function?
- When you first arrived at this activity, how difficult was it for you to perform this function?
- How important is the performance of this function to success at your job?
- Did you receive any formal inservice training in how to perform this function when you arrived at this activity?
- If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity?

The questions listed above form the foundation of a training task analysis. Similar questions have been used previously (Hall, Ford, and Middleton, 1981; Hughes, Ford, Heidt, and Copeland, 1981) to analyze specific jobs and to assess training needs of job incumbents. Responses to the questions provide three basic items of information needed for establishing training priorities:

- frequency of performance of a function
- importance of performance of a function
- difficulty of performance of a function.

The frequency of performance of a function refers to how often an individual does a particular thing. Difficulty of performance is self-explanatory. The term "importance" is essentially synonymous to the term "criticality," which is more frequently used in operational contexts. Criticality indicates the cost of failure to perform a function correctly. Aircraft maintenance functions, for example, may have an extremely high criticality. Thus, even

if a particular function is performed infrequently, it is extremely important that it be done correctly when it is done.

The priority of training for particular functions should be established on the basis of a combination of these three dimensions. Those functions that are frequently performed, very important, and very difficult would be given the highest priority for training. Those functions that are infrequently performed, are not important, and are easily done would be given the lowest priority for training. Training priorities for functions that fall in the middle could be ordered using a variety of rules for combining the three dimensions.

The questions concerning difficulty of performance of particular functions were included to determine if there were differences in inservice needs for personnel when they first arrived as compared to the current time. Also, respondents were specifically asked about the usefulness of inservice for given functions. Finally, to assess the extent of current, formal IST within the NAVEDTRACOM, respondents were asked if they had received any such training in job functions upon arrival at their duty station.

The training manager questionnaire had a third section concerned with functions that instructors may perform under a training manager's supervision. Two questions were asked about specific instructor functions:

- How much difficulty does the typical instructor have performing this function when he or she first reports to this activity?

- How long does it take, in weeks, for the typical new instructor to learn to perform this function adequately?

With the questionnaires developed, the next step was to select representative samples of training activities and personnel.

SAMPLING STRATEGY

Sampling required two steps. First, the population of training activities was determined and sampled. Second, personnel within each training activity were sampled.

To determine the population of training activities, a list of all staff unit identification codes (UIC) was compiled for all Navy courses listed in the Navy Integrated Training Resources and Administrative System (NITRAS). Next, this list of staff UICs was compared with the Navy Comptroller's Manual, Vol. 2, Chapter 5, Revision 42, to identify all Navy activities that were conducting training. There were over 100 activities identified. The next step in reducing the population was to limit it to CNET activities. The reduced list was then presented to TPCs at CNTECHTRA with the request that they nominate as few activities as possible that would be representative of all others on the list. The resulting sample of 35 training activities and detachments is shown in table 1. Although the sample was not randomly drawn,

there is no reason to believe that it was not representative. Further, TPCs who had intimate knowledge of the activities involved agreed that the sample did adequately represent the larger group.

With the sample of activities drawn, it was then necessary to determine how to sample individuals within activities. As a preliminary step in this process, a message[3] was sent to all sampled training activities. Each activity was requested to provide the numbers of personnel at the activity who occupied specific billets/positions. Based on this information, a sampling strategy was selected. A procedure for distributing questionnaires was subsequently enclosed in the questionnaire packets sent to the activities (see appendix A). Random samples consisting of approximately 10 percent of the training instructors and approximately 50 percent of the training managers were requested.

DATA COLLECTION

Questionnaire packets were mailed to the training activities. To promote candor, respondents were requested to return the completed questionnaires directly to the TAEG rather than through command channels. Preaddressed envelopes were provided for this purpose. It was further requested that each training activity return all unneeded, excess questionnaires, so marked, to the TAEG.

DATA PROCESSING AND ANALYSIS

As the questionnaires were returned by mail, the data were entered into computer storage. The Statistical Package for the Social Sciences (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1975) software package was used for data management and analysis. The computational facilities of the Northeast Regional Data Center of the State University System of Florida, located at the University of Florida, Gainesville, Florida, and of the University of Central Florida, Orlando, Florida, were used.

[3]TAEG msg 091450Z of Mar 1982.

TABLE 1. TRAINING ACTIVITIES AND DETACHMENTS SAMPLED

Naval Diving and Salvage Training Center, Panama City
Naval Air Maintenance Training Group Detachment, North Island
Naval Amphibious School, Coronado
Naval School, Explosive Ordnance Disposal, Indian Head
Naval Air Technical Training Center, Millington
Service School Command, Orlando
Naval Submarine Training Center, Pacific
Service School Command, San Diego
Submarine Training Facility, San Diego
Naval Technical Training Center, Corry Station
Naval Damage Control Training Center, Philadelphia
Naval Air Technical Training Center, Lakehurst
Naval Technical Training Center, Meridian
Naval Supply Corps School, Athens
Naval Justice School, Newport
Naval Air Maintenance Training Group Detachment, Oceana
Naval Construction Training Center, Port Hueneme
Service School Command, Great Lakes
Naval Submarine School, Groton
Naval Air Maintenance Training Group, Millington
Trident Training Facility, Bangor
Combat Systems Technical School Command, Mare Island
Naval Technical Training Center, Treasure Island
Naval School, Civil Engineer Corps Officers, Port Hueneme
Naval Construction Training Center, Gulfport
Surface Warfare Officers School Command, Newport
Human Resource Management School, Millington
Naval Education and Training Center, Newport
Fleet Anti-Submarine Warfare Training Center, Atlantic
Fleet Training Center, Norfolk
Fleet Combat Training Center, Atlantic
Fleet and Mine Warfare Training Center, Charleston
Fleet Anti-Submarine Warfare Training Center, Pacific
Fleet Training Center, San Diego
Fleet Combat Training Center, Pacific

SECTION IV

RESULTS

This section presents the results of the analysis of the Inservice Needs Assessment Survey for instructors and for training managers.

RETURN RATES

The questionnaire return statistics are shown in table 2.

TABLE 2. QUESTIONNAIRE STATISTICS

	Number Mailed	Number Useable Returns	Percent Returned
Instructors	775	627	81
Training Managers	517	441	85
Totals	1,292	1,068	83

ANALYTIC STRATEGY

To determine the priority of need for inservice training, several preliminary analytic steps were performed. The responses to frequency of performance of individual function items were factor analyzed for both instructors and training managers. Based on these factor analyses, major function groups were identified. Scales consisting of items comprising major function groups were constructed for frequency, difficulty, and importance of performance, and usefulness of inservice. These major function groups served as the basis for further analysis, including the current extent of IST, differences among different types of personnel in types of major functions performed, and, finally, in the development of priorities for IST. Priorities were developed separately for groups of personnel identified as having different functional requirements.

MAJOR FUNCTION GROUPS

The first step in the analysis was to determine if specific function items could be collected into major function groups. Two steps were required to establish these groups. First, specific function items were grouped by similarities in frequency of performance. Frequencies were used, instead of difficulty or importance of performance, since frequency would reflect a type of job. Second, the same function items grouped by frequency were used

to build scales for the other questions (e.g., difficulty and importance of performance). This strategy was followed in analyzing both the instructor and the training manager data. The results of the factor analyses are reported in appendix B. The resulting major function groups are presented below.

INSTRUCTOR FUNCTIONS. From the factor analysis of instructor data, seven major function groups were identified. Names or labels were assigned to each group based on inspection of the specific function items constituting a major group.

The sets of items constituting each major function group were again factor analyzed to determine if there were meaningful subgroups. For the factor solutions, see appendix B. The seven major function groups, with subgroups for each, are listed in table 3.

TRAINING MANAGER FUNCTIONS. Again, by factor analysis, seven major function areas were identified for training managers. These functions were also broken down into subsets. Both the major function areas and the appropriate subsets are shown in table 4.

SCALE DEVELOPMENT

Based on major function groups established for instructors and for training managers, scales were developed to measure five attributes of each major function group:

- frequency of performance
- difficulty of performance
- difficulty of performance upon arrival
- importance of performance
- usefulness of inservice training.

Each scale consists of the mean of the appropriate specific function items. Thus, an instructor's score on the scale of importance of performance of Academic Counseling and Monitoring would be the mean of his or her responses to the importance of performance of the eight specific function items that constitute the Academic Counseling and Monitoring function group. The reliability of each scale was measured by computing the internal consistency coefficient alpha (Cronbach, 1951). This coefficient indicates the degree to which a set of items within a scale measures a single phenomenon. For established scales, a reliability coefficient of .80 is considered adequate (Carmines & Zeller, 1979); however, for scales developed where repeated administrations are not feasible, lower coefficients are acceptable.

TABLE 3. COMPONENTS OF THE MAJOR FUNCTION AREAS FOR INSTRUCTORS

Academic Counseling and Monitoring
1. Evaluate student performance
Distinguish between academic and nonacademic problems
Identify academic counseling situation as either informal, formal or group
Identify counseling technique appropriate to problem and student
Apply academic counseling technique identified
Follow up to ensure problem solution
Prepare/file counseling reports and records
2. Deal with students from culturally different backgrounds
Curriculum Development
1. Select instructional setting
Develop objectives
Develop tests
Determine sequence of learning objectives
Specify learning events/activities
Review/select existing materials
Develop instruction
2. Analyze existing courses
Conduct operational validation of instructional system
Computer Based Instruction
1. Develop computer managed instruction documents
Operate classroom clusters (Terminet and Opscan)
Interact with computer system through classroom equipment
Interact with computer system through batch equipment
2. Monitor use of CMI equipment
Perform authorized maintenance on CMI system equipment
Identifying Task Elements
1. Conduct job task analysis
Select task functions
Construct job performance measures
2. Provide items for external evaluation

TABLE 3. COMPONENTS OF THE MAJOR FUNCTION AREAS FOR INSTRUCTORS (continued)

Presentation/Delivery of Instruction
1. Prepare self to present instruction Apply principles of learning theory
2. Present elements required by lesson plan/learning guide Monitor student progress during presentation of group-paced instruction
Individualized Instruction
1. Monitor students in an individualized environment Provide for individual differences in learning rates/styles/abilities Interact with students to achieve a positive learning environment
2. Enter students into instructional system
Preparation of External Matters
Prepare training areas Prepare instructional materials Perform operational checks on training aids and/or training equipment

TABLE 4. COMPONENTS OF THE MAJOR FUNCTION AREAS FOR TRAINING MANAGERS

Academic Counseling and Monitoring

1. Evaluate student performance
   Distinguish between academic and nonacademic problems
   Identify academic counseling situation as either informal, formal or group
   Identify counseling technique appropriate to problem and student
   Apply academic counseling technique identified
   Follow up to ensure problem solution

2. Prepare/file counseling reports and records
   Convene and conduct academic review boards

Assuring Quality of Instruction/Internal Evaluation

1. Maintain the quality of the curricula and instruction
   Observe classroom instruction and training exercises periodically
   Provide continuous evaluation of training standards and performance
   Train instructors on teaching methods and techniques
   Evaluate progress of students and staff
   Conduct internal evaluations
   Manage/coordinate the conduct of instruction

2. Review class critiques for possible instructional improvements

Plans for Acquisition/Conduct of Instruction

1. Compute requirements for a course, including manpower, housing, equipment, and facilities
   Develop curriculum documentation
   Validate instructional materials
   Use Navy training plans for course planning
   Manage Technical Training Equipment (TTE) support

2. Use MIL-STD 1379B, "Training Operations and Training Data," to evaluate formats of contractor developed training packages

Administrative Review

1. Implement management analysis techniques to resolve problems in schoolhouse
   Conduct management review
   Maintain staff qualifications

2. Review and evaluate staff utilization
   Ensure that training and attrition records are maintained
   Draft and submit administrative reports

TABLE 4. COMPONENTS OF THE MAJOR FUNCTION AREAS FOR TRAINING MANAGERS (continued)

Managing Curriculum Development
1. Manage/coordinate the curriculum development process Develop plan to develop/revise curriculum
2. Plan training program Administer training program
External Evaluation
Provide information to external evaluation system Use information from external evaluation system
Inservice Training
Conduct inservice training Train staff (PQS and inservice)

Tables 5 and 6 present the internal consistency reliability coefficients or the major function scales developed for instructors and training managers, respectively. Since the alphas range from .52 to .95, they are acceptable as measures of the five aspects of a major function area (i.e., frequency, both difficulties, importance, and usefulness).

COMPARISONS OF FREQUENCIES OF PERFORMANCE

Differences in the frequencies with which functions are performed by individuals within a category (i.e., instructor or training manager) would indicate that these individuals might have different jobs in different contexts. These job differences would, in turn, suggest that the IST needs for individuals in these categories would also differ. To determine if there are different job types, responses to the question about frequency of performance of specific functions within a major function area were analyzed. These results are presented below for instructors and for training managers.

INSTRUCTORS. One-way analyses of variance performed on the frequencies of performance of functions disclosed four distinct subgroups of instructors, on the basis of the method of instruction with which they are primarily involved. These subgroups performed several major functions with different frequencies. The four instructor subgroups identified are:

1. group-paced without computer-based instruction (GP w/o CBI)
2. self-paced without computer based instruction (SP w/o CBI)
3. group-paced with computer based instruction (GP w CBI)
4. self-paced with computer based instruction (SP w CBI).

Figures 1 to 7 display the differences in the frequency of performance of the seven major instructor functions for these four distinct instructor subgroups. Since the major functions represent average frequencies of performance of the specific functions, assigning a definite frequency (e.g., one subgroup performs a function every 3 months, while another subgroup performs the function every 6 months) could be incorrect. A more correct inference would be that one instructor subgroup performs a function more often than another subgroup. The least significant difference (LSD) test (Steele & Torrie, 1960) was used to compare all possible pairs of subgroup means. The following comparisons among the subgroups of training instructors take into account these LSDs ($p < .05$):

- The SP w CBI subgroup performs the Academic Counseling and Monitoring function (figure 1) significantly more often than the other subgroups. There are no significant differences among the other subgroups in frequency of performance.
- The SP w CBI subgroup (figure 2) performs the Curriculum Development function significantly less often than both GP instruction subgroups. There are no significant differences in frequency of performing the Curriculum Development function between the SP subgroups or between the GP subgroups.

TABLE 5. INTERNAL RELIABILITY COEFFICIENTS OF THE MAJOR FUNCTION SCALES FOR INSTRUCTORS

	ALPHA
Frequency of Performance	
Academic Counseling and Monitoring	.90
Curriculum Development	.85
Computer Based Instruction	.79
Identifying Task Elements	.81
Presentation/Delivery of Instruction	.74
Individualized Instruction	.61
Preparation of External Matters	.62
Difficulty of Performance	
Academic Counseling and Monitoring	.87
Curriculum Development	.87
Computer Based Instruction	.83
Identifying Task Elements	.81
Presentation/Delivery of Instruction	.67
Individualized Instruction	.55
Preparation of External Matters	.52
Difficulty of Performance Upon Arrival	
Academic Counseling and Monitoring	.88
Curriculum Development	.87
Computer Based Instruction	.84
Identifying Task Elements	.83
Presentation/Delivery of Instruction	.78
Individualized Instruction	.68
Preparation of External Matters	.64

TABLE 5. INTERNAL RELIABILITY COEFFICIENTS OF THE MAJOR FUNCTION SCALES FOR INSTRUCTORS (continued)

	ALPHA
Importance of Performance	
Academic Counseling and Monitoring	.87
Curriculum Development	.90
Computer Based Instruction	.95
Identifying Task Elements	.83
Presentation/Delivery of Instruction	.79
Individualized Instruction	.66
Preparation of External Matters	.66
Usefulness of Inservice	
Academic Counseling and Monitoring	.94
Curriculum Development	.95
Computer Based Instruction	.95
Identifying Task Elements	.91
Presentation/Delivery of Instruction	.92
Individualized Instruction	.87
Preparation of External Matters	.83

TABLE 6. INTERNAL RELIABILITY COEFFICIENTS OF THE MAJOR FUNCTION SCALES FOR TRAINING MANAGERS

	ALPHA
Frequency of Performance	
Academic Counseling and Monitoring	.88
Assuring Quality of Instruction/Internal Evaluation	.80
Plans for Acquisition/Conduct of Instruction	.76
Administrative review	.75
Managing Curriculum Development	.69
External Evaluation	.68
Inservice Training	.61
Difficulty of Performance	
Academic Counseling and Monitoring	.84
Assuring Quality of Instruction/Internal Evaluation	.80
Plans for Aquisition/Conduct of Instruction	.70
Administrative Review	.74
Managing Curriculum Development	.75
External Evaluation	.69
Inservice Training	.62
Difficulty of Performance Upon Arrival	
Academic Counseling and Monitoring	.86
Assuring Quality of Instruction/Internal Evaluation	.84
Plans for Acquisition/Conduct of Instruction	.74
Administrative Review	.81
Managing Curriculum Development	.78
External Evaluation	.74
Inservice Training	.60

TABLE 6. INTERNAL RELIABILITY COEFFICIENTS OF THE MAJOR FUNCTION SCALES FOR TRAINING MANAGERS (continued)

	ALPHA
Importance of Performance	
Academic Counseling and Monitoring	.87
Assuring Quality of Instruction/Internal Evaluation	.75
Plans for Acquisition/Conduct of Instruction	.83
Administrative Review	.75
Managing Curriculum Development	.78
External Evaluation	.76
Inservice Training	.66
Usefulness of Inservice	
Academic Counseling and Monitoring	.95
Assuring Quality of Instruction/Internal Evaluation	.93
Plans for Acquisition/Conduct of Instruction	.90
Administrative Review	.92
Managing Curriculum Development	.89
External Evaluation	.92
Inservice Training	.78

- From figure 3, the two subgroups without CBI perform the Computer Based Instruction function significantly less often than the subgroups with CBI. Moreover, the SP w CBI subgroup performs the Computer Based Instruction function significantly more often than the GP w CBI subgroup. There is no significant frequency difference between the two subgroups without CBI.

- The two GP subgroups perform the Identifying Task Elements function (figure 4), significantly less often than the SP w/o CBI subgroup. There is no significant difference between the two SP subgroups.

- Both GP subgroups perform the Presentation/Delivery of Instruction function significantly more often than the SP subgroups (figure 5). More specifically, when comparing just the GP subgroups or just the SP subgroups, the subgroup w/o CBI performs the Presentation/Delivery of Instruction function significantly more often than the subgroup with CBI.

- The SP subgroups perform the Individualized Instruction function (figure 6) significantly more often than the GP subgroups. While the GP w/o CBI subgroup performs this function significantly more often than the GP w CBI subgroup, there is no significant difference in frequency between the two SP subgroups.

- The SP with CBI subgroup performs the preparation of External Matters function significantly less often than the other subgroups (figure 7). There are no significant differences among the remaining subgroups in the frequency of performance.

In summary, the instructors, depending on their primary method of instruction, perform major functions with different frequencies.

TRAINING MANAGERS. Subgroups within the training manager category were identified on two bases: (1) the respondent's selected position description or (2) whether the respondent attended Instructor Training School.

Position Description. The training managers described themselves primarily as instructor supervisors (48.5 percent), school heads (16.1 percent), or department heads (14.7 percent). The remaining 20.7 percent classified themselves as "other." A one-way analysis of variance was performed on the frequencies of performing the major functions with the training managers grouped by position description. (Managers in the "other" category were excluded from this analysis.) The results indicated that training managers in different positions performed major functions with significantly different frequencies.

Figures 8 to 14 display the differences by position description in the frequency of performing the seven major training manager functions. As a reminder, specifically assigning a definite frequency of performance to a subgroup could produce an erroneous conclusion, as the major functions

represent average frequencies of performing specific functions. Again, the least significant difference test that was employed for the instructors was also applied to the subgroups of training managers. The following comparisons among the subgroups result from this a posteriori contrast test ($p < .05$):

- Department heads perform the Academic Counseling and Monitoring function (figure 8), significantly less often than instructor supervisors and school heads. There is no significant difference between instructor supervisors and school heads.

- Department heads perform the Assuring Quality of Instruction/Internal Evaluation function (figure 9) significantly less often than instructor supervisors. There is no significant difference between department heads and school heads.

- From figure 11, school heads perform the Administrative Review function significantly more often than instructor supervisors and department heads. There is no significant difference between instructor supervisors and department heads.

- School heads perform the Inservice Training function (figure 14) significantly more often than instructor supervisors and department heads. There is no significant difference between instructor supervisors and department heads.

- There are no significant differences among the subgroups of training managers in the frequencies of performing the Plans for Acquisition of Instruction function (figure 10), the Managing Curriculum Development function (figure 12), or the External Evaluation function (figure 13).

In summary, training manager subgroups, identified by position descriptions, perform some of the major functions with significantly differing frequencies.

Attendance at Instructor Training School. Training managers were also grouped by attendance at Instructor Training School. One-way analyses of variance showed that those training managers who attended IT School performed the following major function areas significantly more often than those who did not attend IT School:

- Academic Counseling and Monitoring (F (1,417) = 24.33, $p < .0001$)

- Assuring Quality of Instruction/Internal Evaluation (F (1,406) = 5.70, $p < .02$)

- Inservice Training (F (1,418), $p < .003$).

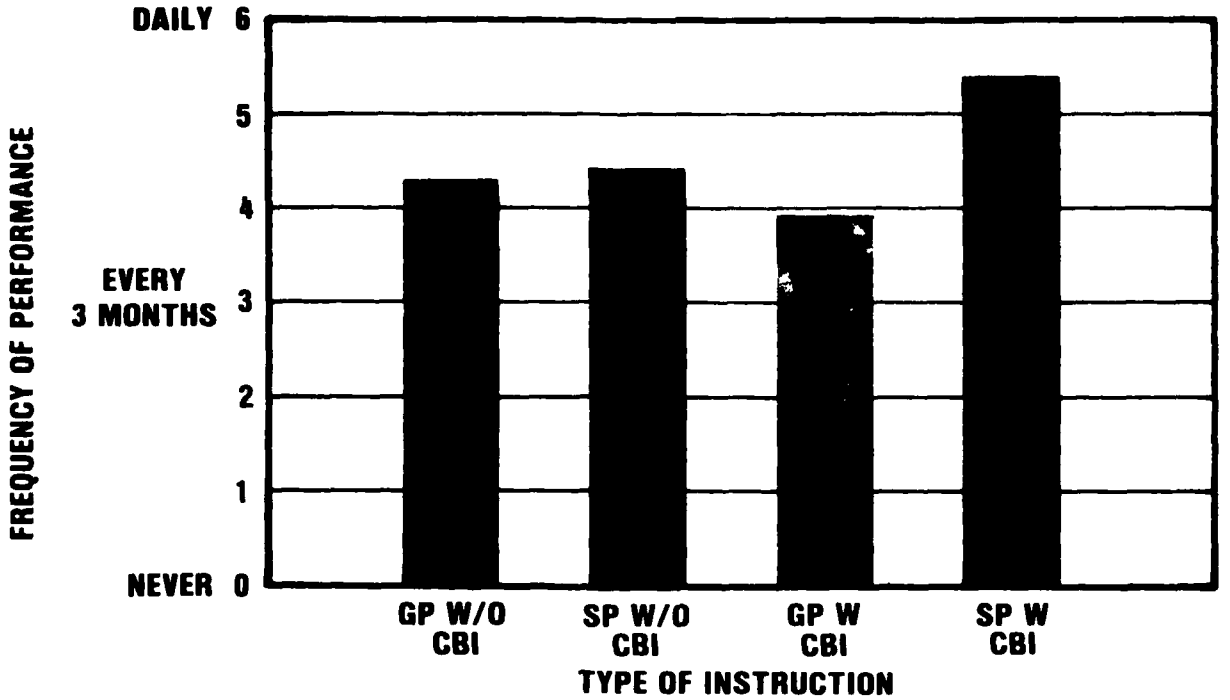

Figure 1. Frequency of Performance Academic Counseling and Monitoring

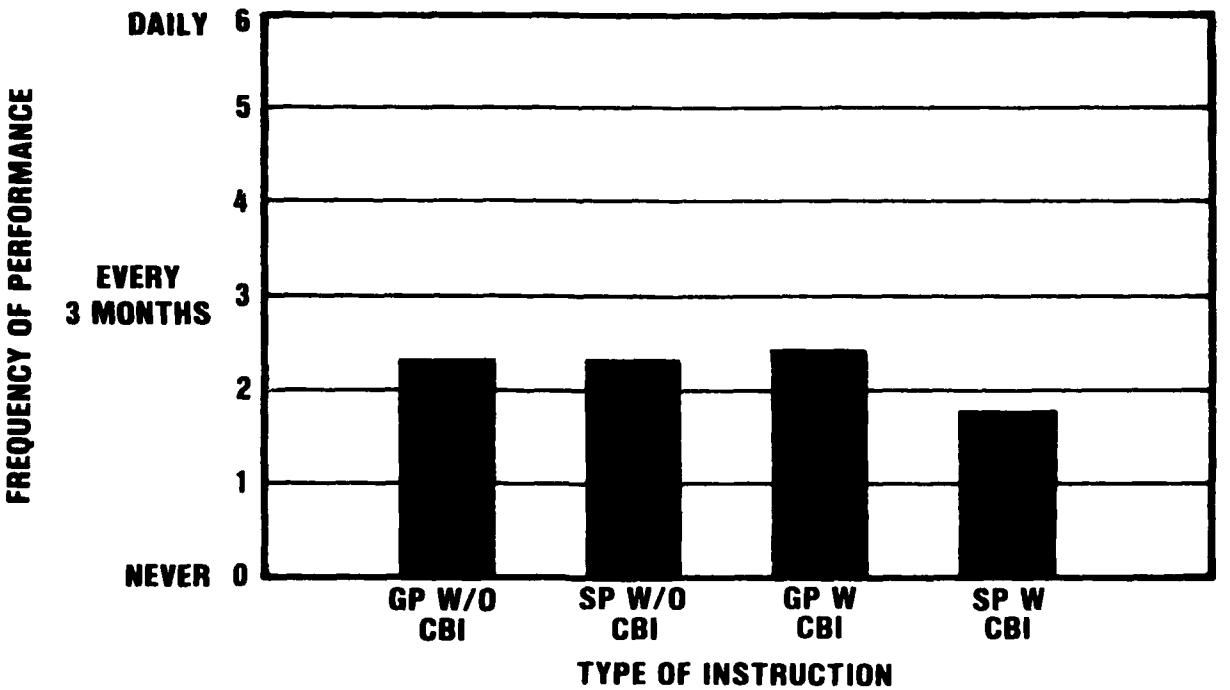

Figure 2. Frequency of Performance Curriculum Development

Note: Frequencies in figures 1 through 14 were derived by subtracting the mean frequency for each subgroup from seven so that frequency increases as the scale value increases.

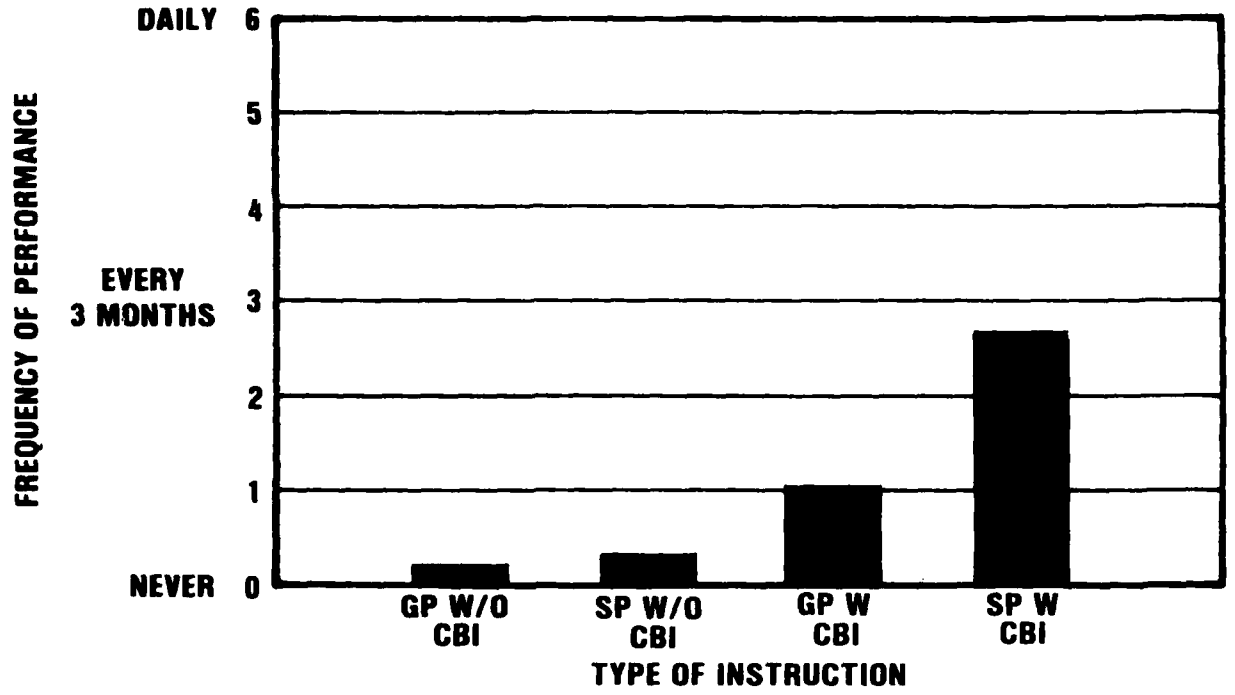

Figure 3. Frequency of Performance Computer Based Instruction

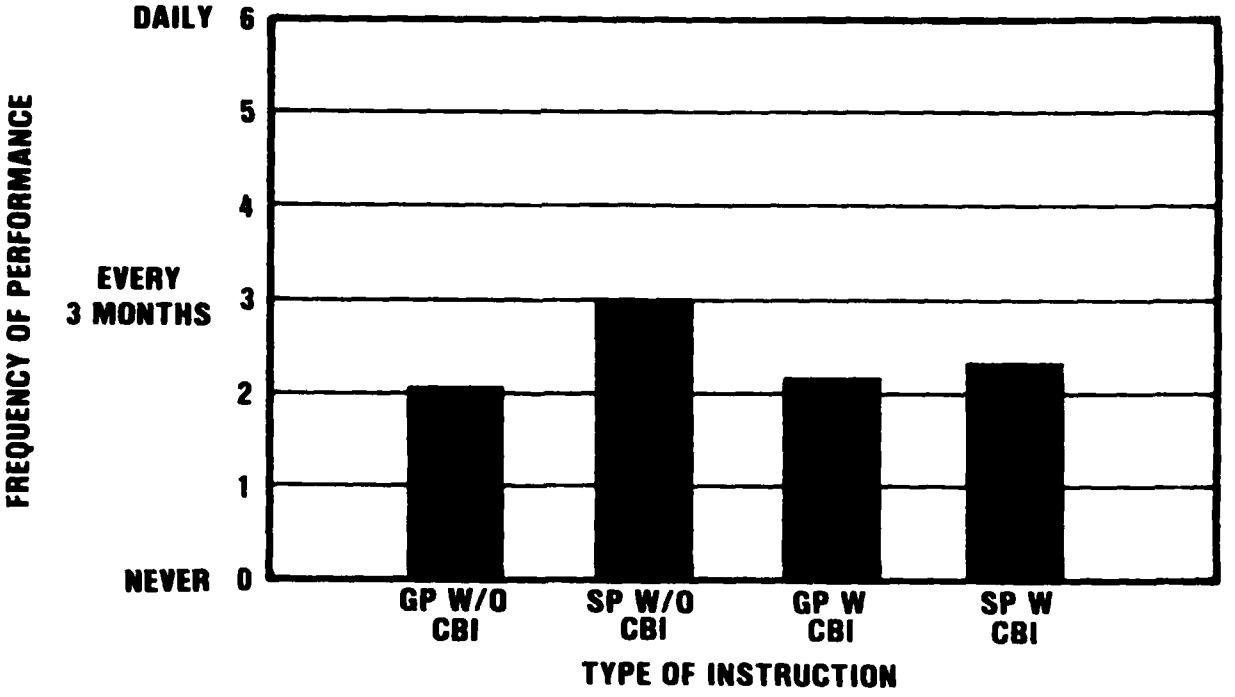

Figure 4. Frequency of Performance Identifying Task Elements

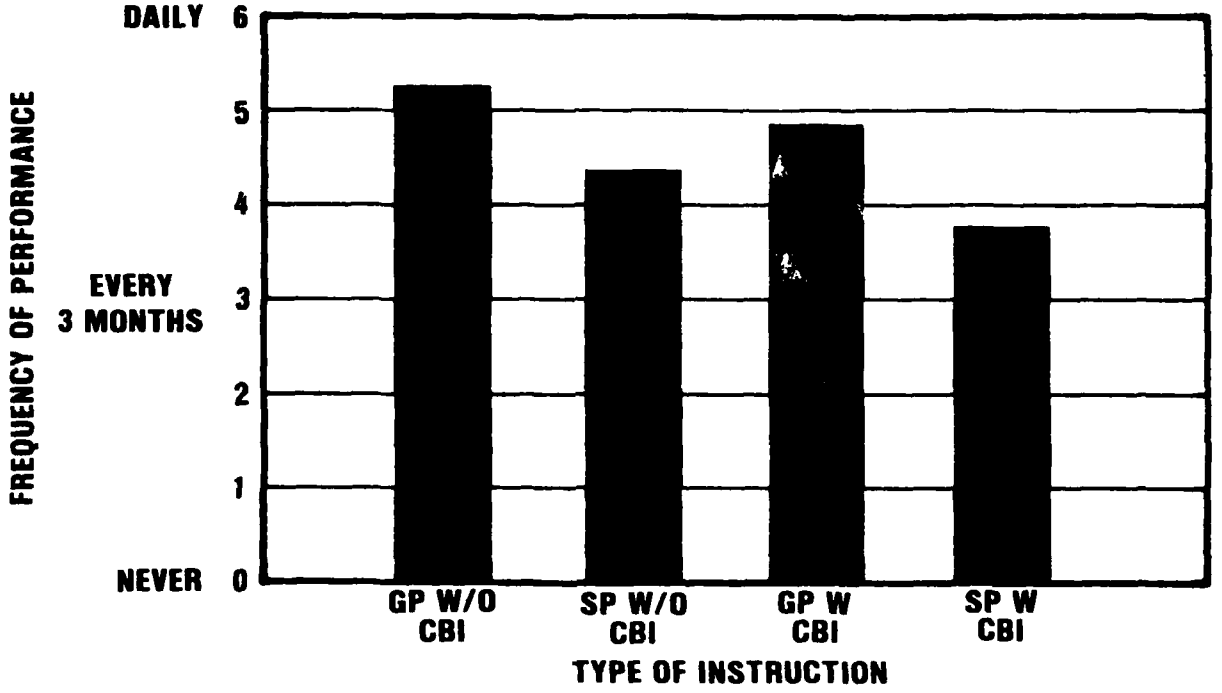

Figure 5. Frequency of Performance Presentation/Delivery of Instruction

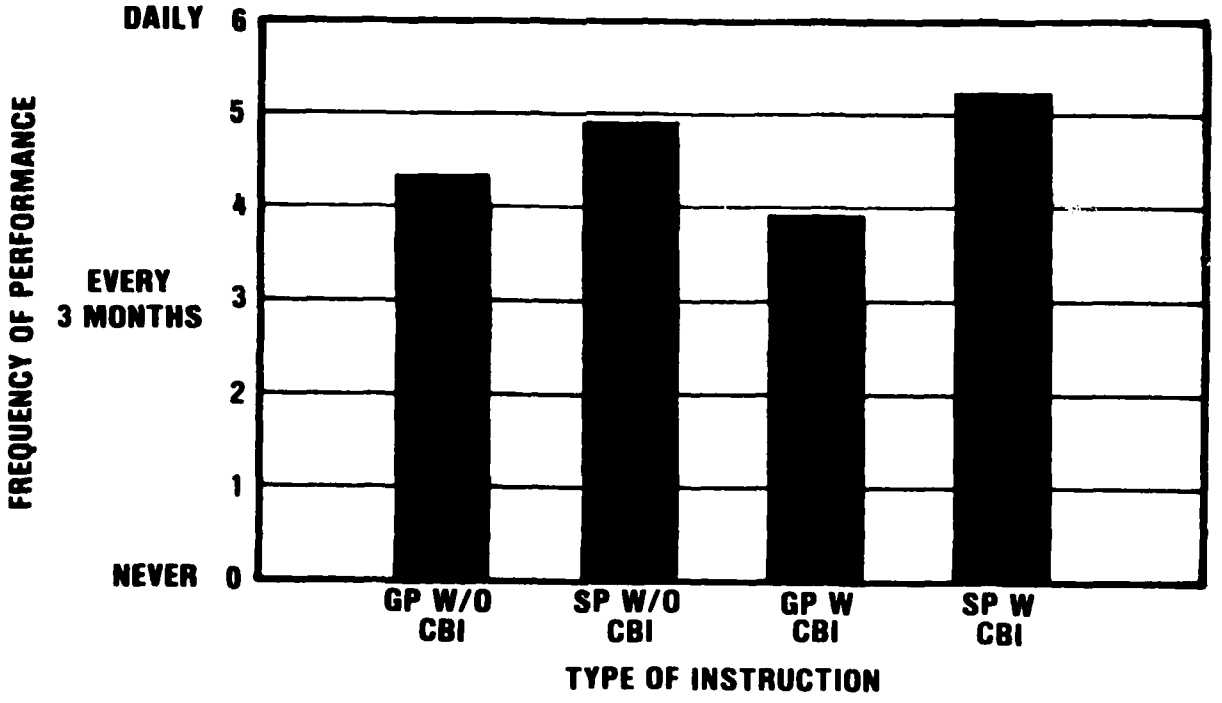

Figure 6. Frequency of Performance Individualized Instruction

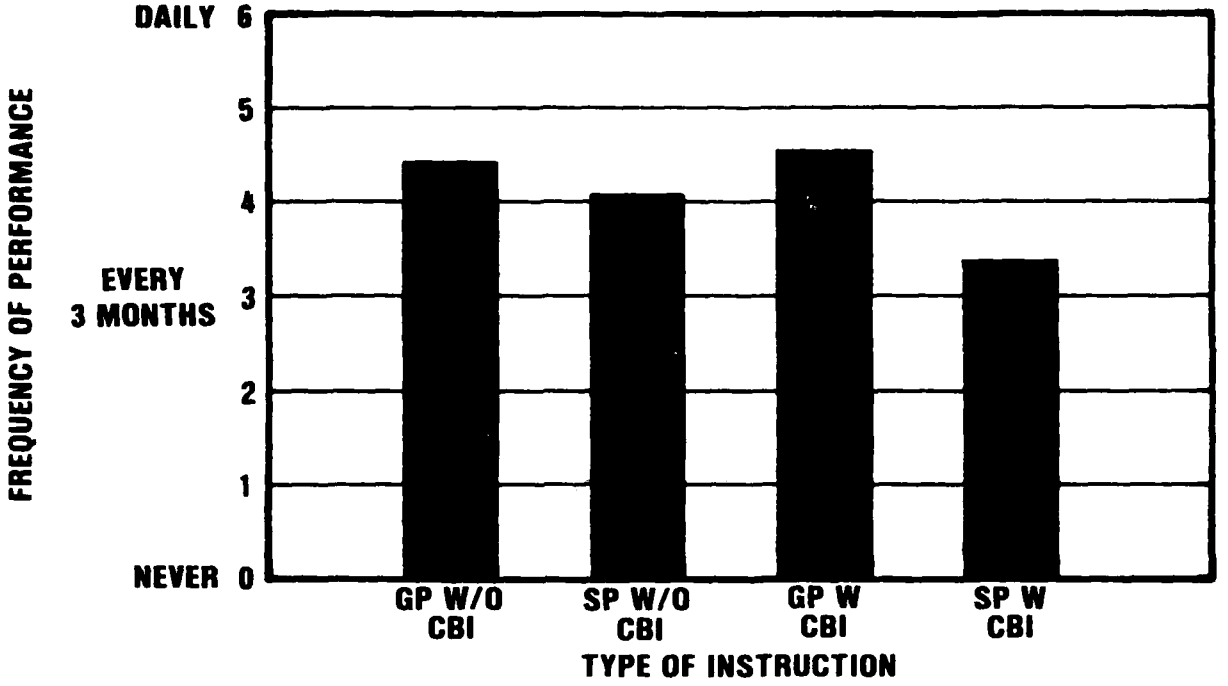

Figure 7. Frequency of Performance Preparation of External Matters

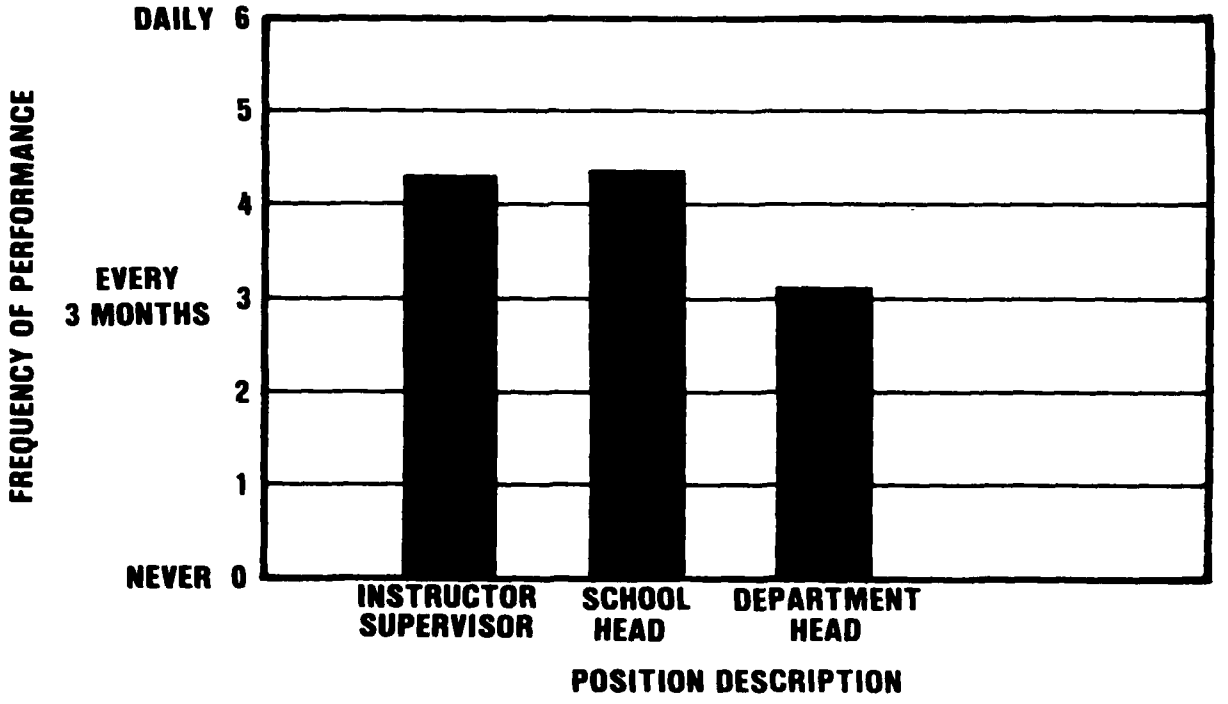

Figure 8. Frequency of Performance Academic Counseling and Monitoring

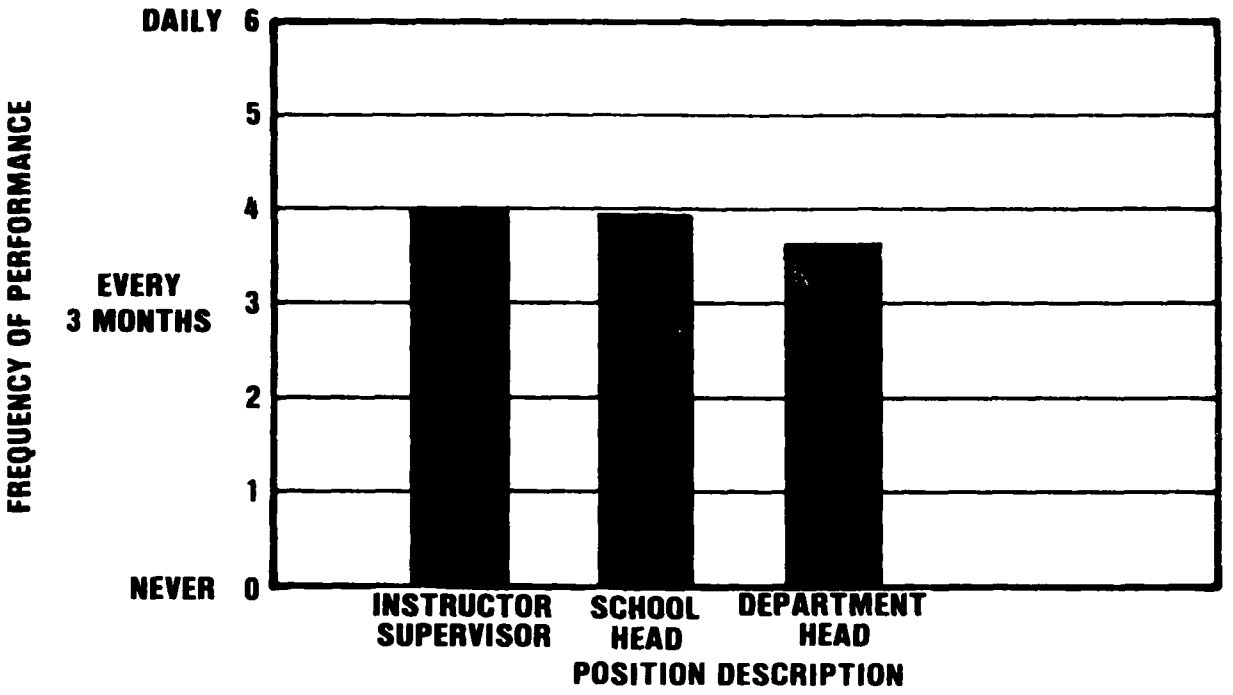

Figure 9. Frequency of Performance Quality of Instructn/Intrnl Evaluation

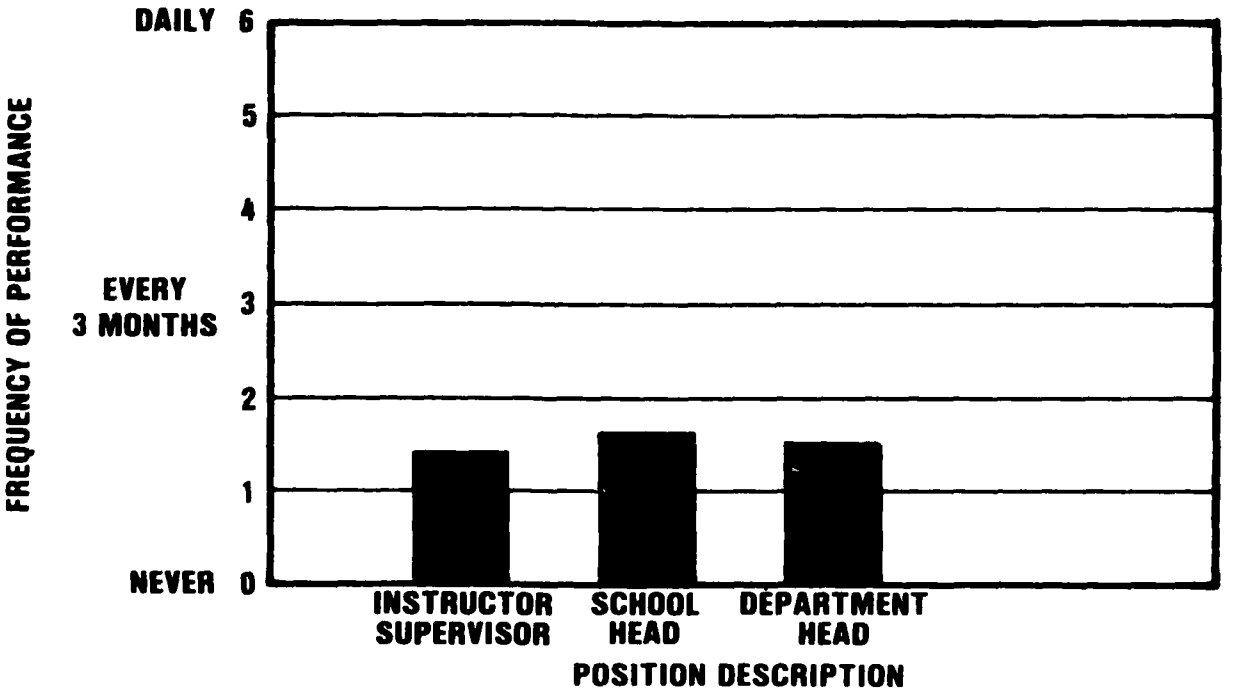

Figure 10. Frequency of Performance Plans Acquisition/Conduct of Instr.

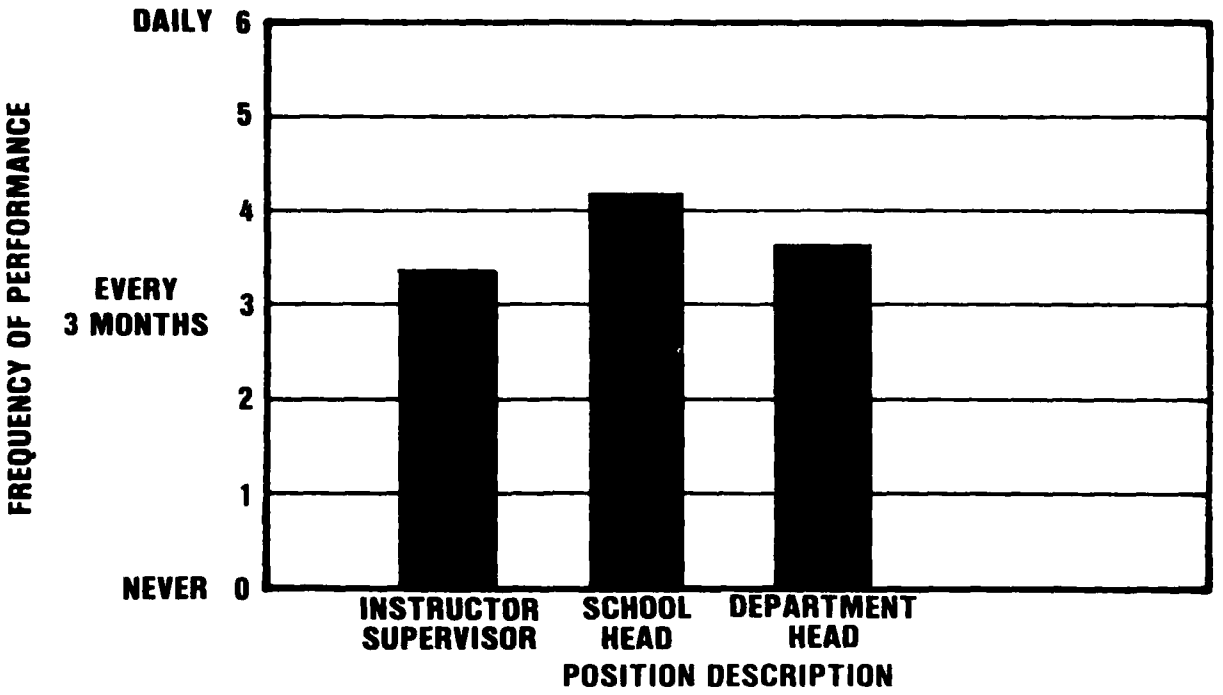

Figure 11. Frequency of Performance Administrative Review

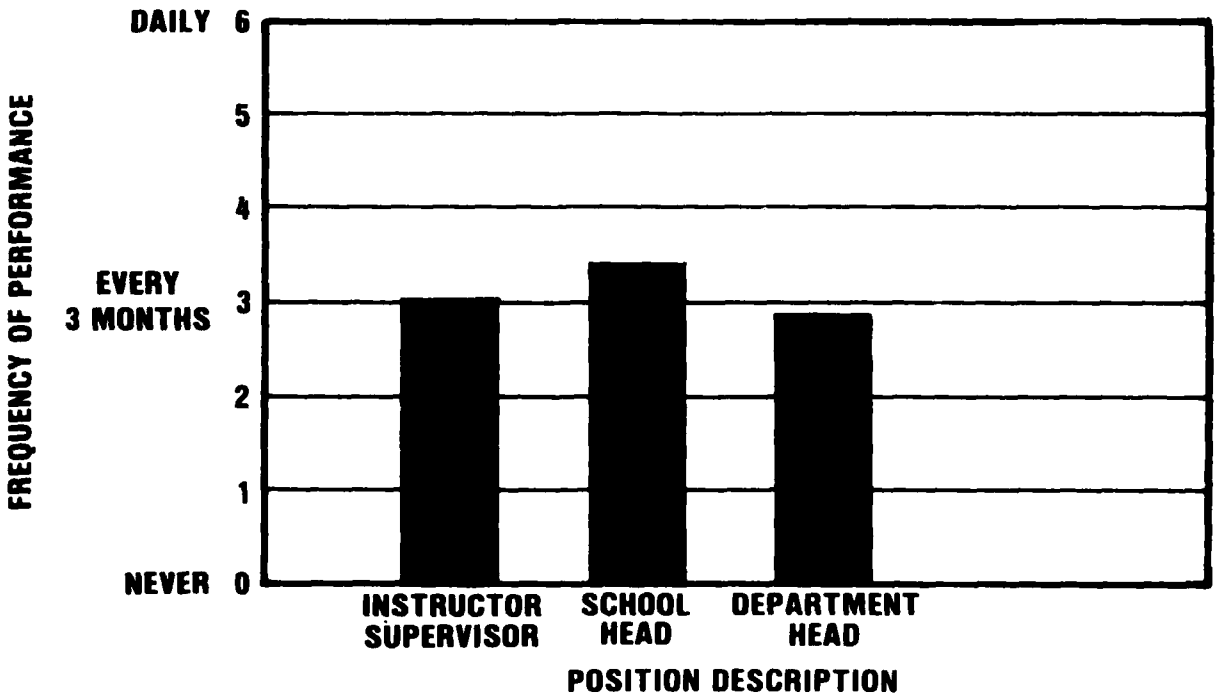

Figure 12. Frequency of Performance Managing Curriculum Development

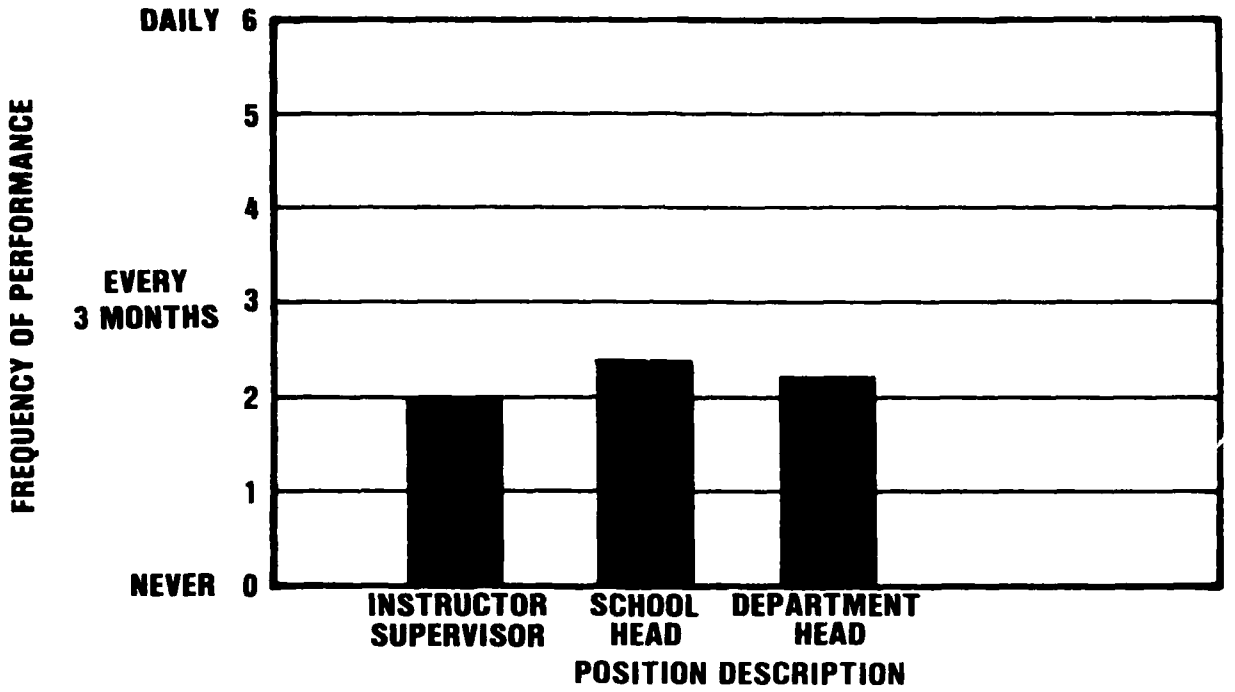

Figure 13. Frequency of Performance External Evaluation

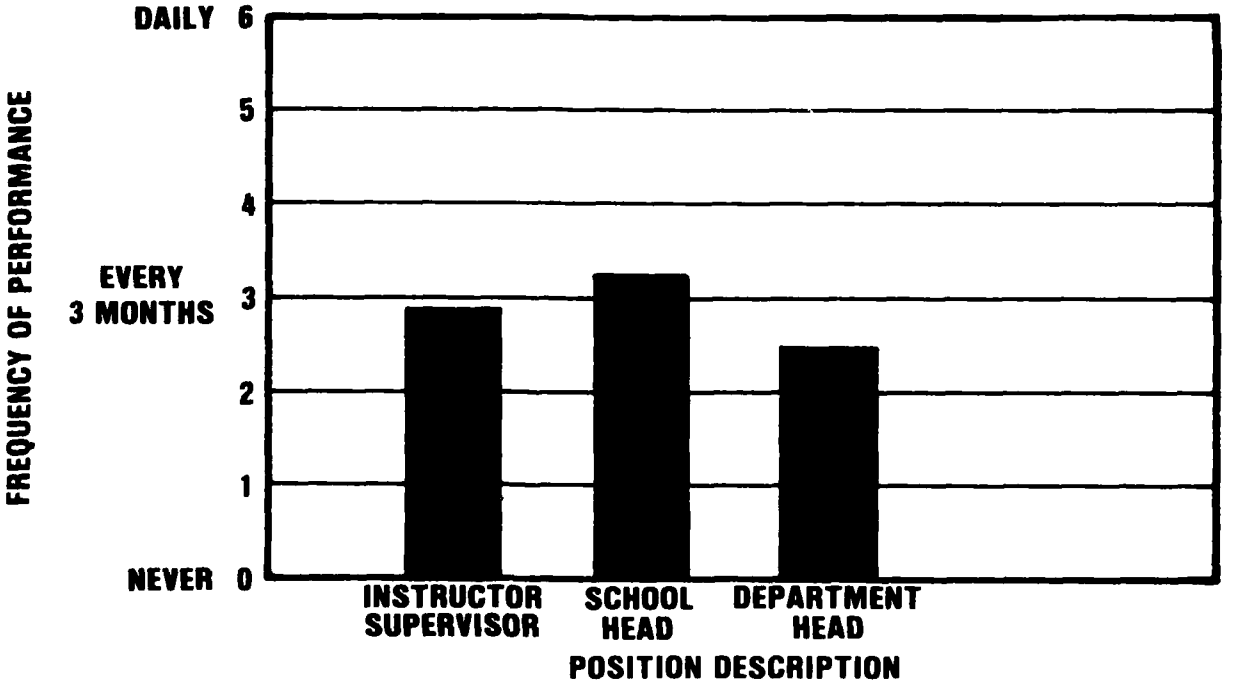

Figure 14. Frequency of Performance Inservice Training

Although training managers grouped by attendance at IT School differ in function performance, groupings based on position descriptions were considered more adequate for determining the extent of current inservice training and for developing IST priorities since these position descriptions reflect different jobs while attendance at IT School does not.

DEVELOPING PRIORITIES FOR INSERVICE TRAINING

This subsection describes how priorities for IST were developed. First, rank orders were derived for the scales reflecting various attributes (e.g., importance, difficulty) of the major function groups for instructors and training managers. Then, a ranking algorithm was applied to the rank orders to establish overall IST priorities.

RANKING FUNCTIONS. Major functions were ranked for four attributes (i.e., importance, difficulty, frequency, and usefulness) for each subgroup of instructors and training managers separately. This ranking was performed simply by examining the mean scores a subgroup received on a major function and assigning a "1" to the function with the highest score, a "2" to the function with the next highest score, and so on. The procedure was performed for all subgroups of instructors and training managers for four major function attributes, frequency of performance, importance of performance, difficulty of performance, and usefulness of inservice training.

The difficulty upon arrival scales are omitted. Both difficulty scales were highly correlated among the major functions (mean correlation = .59 for the training instructors; mean correlation = .79 for the training managers); therefore, the additional information provided by the difficulty upon arrival scales would be minimal.

Instructors. Table 7 presents the rank orders for the major function scales for instructors grouped by primary method of instruction. The ranking is in descending order from "1" to "7" (i.e., a value of "1" is greatest; a value of "7" is the least). As illustrated in table 7, those instructors in GP courses without CBI:

- most frequently perform the Presentation/Delivery of Instruction function
- perceive the Computer Based Instruction function as most difficult
- perceive the Presentation/Delivery of Instruction function as most important
- expect inservice training for the Presentation/Delivery of Instruction function to be most useful.

By examining table 7, rank orders for the other subgroups can be similarly determined.

TABLE 7. RANK ORDERS OF FUNCTIONS BY PRIMARY METHOD OF INSTRUCTION FOR INSTRUCTORS

Function	Primary Method of Instruction															
	Group-paced Without CBI[1]				Self-paced Without CBI				Group-paced With CBI				Self-paced With CBI			
	F[2]	D	I	U	F	D	I	U	F	D	I	U	F	D	I	U
Academic Counseling and Monitoring	4	4	3	3	2	3	4	1	4	4	3	4	1	4	1	1
Curriculum Development	5	3	5	4	6	2	6	3	5	1	5	3	7	1	6	5
Computer Based Instruction	7	1	7	7	7	1	7	7	7	3	7	7	5	7	7	6
Identifying Task Elements	6	2	6	6	5	7	5	2	6	2	6	6	6	2	4	7
Presentation/Delivery of Instruction	1	7	1	1	3	5	1	4	1	7	1	2	3	3	5	3
Individualized Instruction	3	6	4	5	1	6	3	5	3	5	4	5	2	6	2	2
Preparation of External Matters	2	5	2	2	4	4	2	6	2	6	2	1	4	5	3	4

[1]CBI = Computer Based Instruction.

[2]F, D, I, and U = Frequency, Difficulty, Importance, and Usefulness.

Training Managers. The rank orders for the major function scales for training managers with different position descriptions are shown in table 8. Again, ranking is in descending order from "1" to "7." According to table 8, instructor supervisors:

- most frequently perform the Academic Counseling and Monitoring function
- perceive the Plans for Acquisition/Conduct of Instruction function as most difficult
- perceive the Assuring Quality of Instruction/Internal Evaluation function as most important
- expect inservice training for the Assuring Quality of Instruction/ Internal Evaluation function to be most useful.

Similarly, by examining table 8, rank orders for the other subgroups can be determined.

RANKING ALGORITHM. An algorithm was applied to the rank orders of the major function scales to determine the priorities for inservice training for each subgroup of the training instructors and training managers. This algorithm was previously used for determining priorities for IST for Curriculum and Instruction Standards Office personnel and for training executives (Ford and Hall, 1983). The algorithm used to develop overall inservice priority is:

Priority = (Importance x Difficulty x Usefulness) + Frequency.

The numbers used in this formula were the rank orders (table 7 and table 8) of the means of the importance, difficulty, usefulness, and frequency scales for each of the major instructor and training manager function areas.

Using this ranking algorithm, IST priority scores were computed for instructors and training managers.

Priority Scores. Priority scores, representing four aspects (i.e., frequency, difficulty, importance, usefulness) of a major function area, were computed using the ranking algorithm with the major function areas within each subgroup. For example, the priority score for the Academic Counseling and Monitoring function for the group-paced without computer based instruction subgroup is (3x4x3) + 4 = 40 (table 7). The "4s" represent the difficulty and frequency aspect, respectively, and the "3s" represent the importance and usefulness aspect. Similarly, the priority score for the Individualized Instruction function for this subgroup is 123. Since higher priority is indicated by a lower score, then, for this subgroup, the Academic Counseling and Monitoring function would have a higher priority for inservice training than the Individualized Instruction function.

TABLE 8. RANK ORDERS OF FUNCTIONS BY POSITION DESCRIPTION FOR TRAINING MANAGERS

Function	Position Description											
	Instructor Supervisor				School Head				Department Head			
	F[1]	D	I	U	F	D	I	U	F	D	I	U
Academic Counseling and Monitoring	1	7	2	3	1	7	4	4	3	7	4	7
Assuring Quality of Instruction/ Internal Evaluation	2	6	1	1	3	3	1	1	1	6	1	2
Plans for Acquisition/Conduct of Instruction	7	1	7	5	7	4	7	5	7	1	6	4
Administrative Review	3	5	3	4	2	6	2	3	2	4	3	3
Managing Curriculum Development	4	2	4	2	4	1	3	2	4	2	2	1
External Evaluation	6	3.5	6	6	6	2	6	7	6	3	7	5
Inservice Training	5	3.5	5	7	5	5	5	6	5	5	5	6

[1]F, D, I, and U = Frequency, Difficulty, Importance, and Usefulness.

Priority scores were computed for each major function area within the subgroups of the training instructors and training managers. These scores were then ranked from lowest score to highest score giving an overall priority from one to seven, accordingly.

OVERALL PRIORITY. The priorities established for inservice training take into account the reported frequency, difficulty, importance, and usefulness aspects of major function areas. The overall priorities for IST for instructors are reported first, followed by the overall priorities for training managers.

Instructors. Table 9 presents the overall priorities for IST for instructors grouped by primary method of instruction. In the table, a value of "1" indicates highest priority, and a value of "7" indicates lowest priority. Therefore, according to table 9, for the GP without CBI subgroup, the Presentation/Delivery of Instruction function has the highest priority for inservice training. It is followed successively by the Preparation of External Matters function, the Academic Counseling and Monitoring function, the Computer Based Instruction function, the Curriculum Development function, the Identifying Task Elements function, and the Individualized Instruction function. The order of priorities for IST can be read similarly for the other subgroups from table 9. Also, comparisons among the subgroups can be made. For example, the Academic Counseling and Monitoring function has highest priority for inservice training for the two self-paced subgroups, the Individualized Instruction function has lowest priority for both subgroups without CBI, and the Computer Based Instruction function has lowest priority for the two subgroups with CBI.

Training Managers. The overall priorities for IST for training managers with different position descriptions are presented in table 10. In the table, a value of "1" indicates highest priority, and a value of "7" indicates lowest priority. As can be seen in table 10, the Assuring Quality of Instruction/Internal Evaluation function has the highest priority for instructor supervisors. The subsequent priorities for instructor supervisors are, in descending order of precedence: the Managing Curriculum Development function, the Plans for Acquisition/Conduct of Instruction function, the Academic Counseling and Monitoring function, the Administrative Review function, the Inservice Training function, and, finally, the External Evaluation function. The order of priorities for IST for the remaining subgroups can be read from table 10.

Comparisons among the subgroups of the training managers can also be seen by examining table 10. Instructor supervisors and school heads have equal priorities for IST in the Assuring Quality of Instruction/Internal Evaluation and the Managing Curriculum Development functions; instructor supervisors and department heads have equal priorities in the Plans for Acquisition/Conduct of Instruction and Inservice Training functions. The priorities for inservice training are nearly the same for all three subgroups for the Assuring Quality of Instruction/Internal Evaluation, the Managing Curriculum Development, and the Inservice Training functions.

TABLE 9. OVERALL PRIORITY OF FUNCTIONS FOR INSERVICE TRAINING FOR INSTRUCTORS

Function[1]	Primary Method of Instruction			
	Group-Paced Without CBI[2]	Self-Paced Without CBI	Group-Paced With CBI	Self-Paced With CBI
Academic Counseling and Monitoring	3	1	4	1
Curriculum Development	5	3	3	3
Computer Based Instruction	4	5	7	7
Identifying Task Elements	6	6	5	5
Presentation/Delivery of Instruction	1	2	2	4
Individualized Instruction	7	7	6	2
Preparation of External Matters	2	4	1	6

[1]See table 3 for descriptions of the major function areas.

[2]CBI = Computer Based Instruction.

TABLE 10. OVERALL PRIORITY OF FUNCTIONS FOR INSERVICE TRAINING FOR TRAINING MANAGERS

Function[1]	Position Description		
	Instructor Supervisor	School Head	Department Head
Academic Counseling and Monitoring	4	5	7
Assuring Quality of Instruction/ Internal Evaluation	1	1	2
Plans for Acquisition/Conduct of Instruction	3	6	3
Administrative Review	5	3	4
Managing Curriculum Development	2	2	1
External Evaluation	7	4	5
Inservice Training	6	7	6

[1]See table 4 for descriptions of the major function areas.

DIFFICULTY AND TIME TO LEARN INSTRUCTOR FUNCTIONS

This subsection compares training manager and instructor responses to questions concerning the difficulty of performing instructor functions upon arrival at a training activity. Also included in this subsection are the training managers' responses to the questions about the time it takes a typical new instructor to learn to perform instructor functions.

DIFFICULTY OF PERFORMANCE. The training managers rated the difficulty a typical instructor has in performing specific instructor functions when he or she first reports to an activity. Instructors rated the difficulty that they themselves had upon arrival. For each function, instructors were asked, "When you first arrived at this activity, how difficult was it for you to perform this function?" The same question, appropriately modified, was asked of training managers.

Scales were developed for the training managers for each of the seven instructor function groups using the same specific function items as were used for the training instructors (table 3). The mean difficulty rating for each major function group was computed for the training managers and compared with the mean ratings from instructors by performing t-tests for significant differences in sample means.

The results of the comparisons between the training managers' average ratings of the difficulty instructors have in performing their functions and the instructors' average difficulty ratings are presented in table 11. The table shows that training managers perceive that instructors have significantly more difficulty than instructors report in the following major function areas:

- Academic Counseling and Monitoring
- Curriculum Development
- Computer Based Instruction
- Identifying Task Elements.

However, according to table 11, the instructors report significantly more difficulty than the training managers perceive in:

- Presentation/Delivery of Instruction
- Individualized Instruction.

There is no significant difference in reports of difficulty in performing the Preparation of External Matters function.

TIME TO LEARN. Related to the difficulty typical instructors have in performing instructor functions when they arrive at an activity is the time that it takes for these instructors to learn to perform their functions adequately. Training Managers were asked to estimate the length of time, in weeks, that it takes a typical new instructor to perform his or her instructor functions adequately (appendix A). Scales were developed from the training managers' questionnaire items to represent the major instructor functions (table 3), and the average number of weeks to learn each major instructor function was computed. Table 12 presents these computed averages for the training managers by their different position descriptions.

TABLE 11. DIFFICULTY IN PERFORMING INSTRUCTOR FUNCTIONS

Training Managers:	Training Instructors:
How much difficulty does the typical instructor have performing this function when he or she first reports to this activity?	When you first arrived at this activity, how difficult was it for you to perform this function?
(1) No difficulty (2) Slight difficulty (3) Some difficulty (4) Much difficulty (5) Very much difficulty	(1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult

Instructor Function	Training Managers Mean Rating	Instructors Mean Rating	t	DF
Academic Counseling and Monitoring	2.621	2.229	5.958*	569
Curriculum Development	3.141	2.581	3.959*	152
Computer Based Instruction	3.090	2.180	2.382*	24
Identifying Task Elements	3.142	2.437	6.163*	298
Presentation/Delivery of Instruction	1.542	2.292	7.822*	517
Individualized Instruction	1.611	2.130	3.750*	360
Preparation of External Matters	2.175	2.212	0.178	464

* $p < .05$

TABLE 12. AVERAGE NUMBER OF WEEKS FOR A TYPICAL NEW INSTRUCTOR TO LEARN TO PERFORM INSTRUCTOR FUNCTIONS PER TRAINING MANAGERS

Instructor Function	Instructor Supervisor (N[1]=203)	School Head (N=62)	Department Head (N=57)	Overall (N=415)
Academic Counseling and Monitoring	5.77	5.01	7.24	6.02
Curriculum Development	7.05	4.71	9.05	7.06
Computer Based Instruction	1.01	0.67	1.19	0.95
Identify Task Elements	5.10	3.77	10.76	5.91
Presentation/Delivery of Instruction	35.32	30.35	34.98	33.81
Individualized Instruction	25.98	24.09	27.22	25.48
Preparation of External Matters	20.53	19.70	23.18	20.69

[1] N = Average sample size

Overall, training managers perceived that it takes the typical new instructor the longest length of time to learn to perform adequately the Presentation/Delivery of Instruction function (table 12). The Computer Based Instruction function takes the least amount of time to learn to perform adequately.

EXTENT OF INSERVICE TRAINING

To determine the extent of IST offered currently within the NAVEDTRACOM, instructors and training managers were asked if they received any formal IST in how to perform specific functions when they first arrived at their activity (appendix A). The results of analyses of responses to this question are presented below.

INSTRUCTORS. Table 13 presents the average percentages of instructors who reported that they received IST. Overall, an average of 48.7 percent of the instructors received inservice. This overall average ranges from 71.4 percent for the Presentation/Delivery of Instruction function to 10.5 percent for the Computer Based Instruction function. As might be expected, the GP and SP without CBI subgroups showed minimal IST for the Computer Based Instruction function, while the instructors in the GP and SP with CBI reported receiving inservice training in 20 to 30 percent of the Computer Based Instruction functions. For other major function groups, IST for instructors is more extensive, with instructors reporting IST in 40 to 70 percent of the specific functions in each major function group.

The extent of IST offered instructors varies widely by activity. One activity provides no inservice in any of the eight specific functions comprising the Academic Counseling and Monitoring function group, and one activity provides IST in all eight. The remaining activities range in coverage of this major function from 72 percent to 13 percent of the specific function items. For Curriculum Development functions, no activity covers all nine specific functions, one provides IST in none, and the remaining activities cover from 17 percent to 70 percent of the Curriculum Development functions. Coverage of the other major function groups is similarly varied across the activities. Thus, the extent of coverage of these seven major instructor functions varies widely depending on the particular activity.

TRAINING MANAGERS. Table 14 presents the average percentages of training managers who reported that they received IST. Overall, an average of 18.3 percent of the training managers reported receiving IST in specific functions. Training managers reported IST in about 25 percent of the specific functions of only two major function groups: Academic Counseling and Monitoring and Assuring Quality of Instruction/Internal Evaluation. Inservice for three of the major function groups covered less than 15 percent of their specific functions.

TABLE 13. AVERAGE PERCENTAGES OF INSTRUCTORS WHO REPORTED THAT THEY RECEIVED INSERVICE

Major Function	Group-Paced Without CBI[1] (N[2]=344)	Self-Paced Without CBI (N=32)	Group-Paced With CBI (N=52)	Self-Paced With CBI (N=45)	Total
Academic Counseling and Monitoring	50.6	38.3	51.9	60.4	50.8
Curriculum Development	49.4	38.3	55.3	38.5	48.2
Computer Based Instruction	6.1	8.0	21.8	31.4	10.5
Identifying Task Elements	43.1	34.7	43.8	40.7	42.3
Presentation/Delivery of Instruction	72.9	53.6	70.3	71.9	71.4
Individualized Instruction	52.7	47.1	55.3	65.3	53.9
Preparation of External Matters	65.3	54.1	67.2	57.9	64.1
Overall	48.6	39.2	52.2	52.3	48.7

[1]CBI = Computer Based Instruction.
[2]N = average sample size.

By examining table 14, it can be seen that, overall, relatively more instructor supervisors received IST than did school heads and, in turn, department heads. For all three categories of managers, more people received IST in the Assuring Quality of Instruction/Internal Evaluation function than they did in any other area. The least emphasized areas of IST are:

- for instructor supervisors, the Plans for Acquisition/Conduct of Instruction function
- for school heads, the Administrative Review function
- for department heads, the External Evaluation function.

TABLE 14. AVERAGE PERCENTAGES OF TRAINING MANAGERS WHO REPORTED THAT THEY RECEIVED INSERVICE

Major Function	Instructor Supervisor (N^1=167)	School Head (N=60)	Department Head (N=53)	Overall Average
Academic Counseling and Monitoring	29.7	17.5	10.1	24.0
Assuring Quality of Instruction/Internal Evaluation	33.2	18.3	16.7	26.6
Plans for Acquisition/ Conduct of Instruction	13.8	11.9	9.3	12.9
Administrative Review	16.7	10.0	6.6	13.8
Managing Curriculum Development	20.1	13.7	14.2	17.2
External Evaluation	18.2	11.0	5.8	14.9
Inservice Training	21.4	15.3	10.2	18.7
Overall	21.9	14.0	10.4	18.3

[1]N = Average sample size.

As was the case with instructor IST, the extent of inservice training for training managers varies from activity to activity. For example, five activities provide no IST in the Academic Counseling and Monitoring group, while the extent of coverage for the remaining activities ranges from 4 percent to 50 percent of the specific functions of Academic Counseling and Monitoring. For the Assuring Quality of Instruction/Internal Evaluation function group, one activity provides no IST and the other activities cover from 6 to 88 percent of the specific functions. The other major function groups show similar variations in coverage from activity to activity. Thus, IST for training managers varies from activity to activity in the extent of its coverage of the seven major function groups.

SECTION V

DISCUSSION

This section presents a discussion of the results of the inservice training needs assessment for instructors and training managers. Some limitations on interpreting the results are also discussed.

MAJOR FUNCTION GROUPS

Major function groups were derived empirically for instructors and training managers. These major function groups are discussed below.

INSTRUCTOR FUNCTIONS. The jobs of instructors comprise seven major function groups:

- Academic Counseling and Monitoring
- Curriculum Development
- Computer Based Instruction
- Identifying Task Elements
- Presentation/Delivery of Instruction
- Individualized Instruction
- Preparation of External Matters

These seven major function groups constitute the major tasks of instructors. Some of these tasks, such as computer based instruction or individualized instruction, will only apply to certain instructors. Others will be required of almost all instructors. However, these seven major tasks do include virtually all the instruction-related activities any instructor is likely to perform. Thus, an inservice training program intended to improve the quality of instructor performance should address each of these tasks.

There are four different kinds of instructors based on the method of instruction they use and on whether or not they use computer-based instruction: (1) group-paced without computer-based instruction, (2) self-paced without computer-based instruction, (3) group-paced with computer-based instruction, and (4) self-paced with computer-based instruction. There are significant differences among these four groups in how often they perform some of the seven major functions. Therefore, IST needs are ordered separately in terms of priority for each of these four groups.

There are systematic differences among the four different types of instructors. Instructors who use SP CBI report more frequent academic counseling and monitoring, more frequent individualized instruction and more frequent use of CBI. They also report less curriculum development and preparation of external matters. The more frequent academic counseling and monitoring may be due to greater freedom from routine instructional duties. Less involvement in curriculum development may be due to the greater likelihood that curriculum is developed by external sources (e.g., Instructional Program Development Centers). More frequent performance of individualized and computer based instruction would be expected only for this group.

The GP CBI instructors are distinguished from the other instructors primarily by more frequent use of CBI compared to the nonCBI groups. The SP nonCBI instructors perform more individualized instruction, which would be expected. However, they also report more frequent performance of the identification of task elements. The GP nonCBI instructors report more involvement in the actual presentation and delivery of instruction, which would coincide with expectations about the traditional platform instructor.

TRAINING MANAGER FUNCTIONS. Training managers perform seven major tasks:

- Academic Counseling and Monitoring
- Assuring Quality of Instruction/Internal Evaluation
- Plans for Acquisition/Conduct of Instruction
- Administrative Review
- Managing Curriculum Development
- External Evaluation
- Inservice Training.

These seven major tasks comprise the bulk of the duties that training managers perform. However, some managers will be involved with all of these tasks and some will not. But, an inservice program designed to improve the quality of performance of training managers should address all of these major functions.

The three distinct groups of training managers identified were based on the respondents' selection of a position title: instructor supervisor, school head, or department head. There are significant differences among these three types of training managers in how often they perform some of the major function groups. Also, managers who have attended Instructor Training School report some different frequencies of performance than those who did not.

As with instructors, there are systematic differences among the three groups of training managers. Department Heads report less frequent performance of the Academic Counseling and Monitoring function, while school heads report more performance of Administrative Review and Inservice Training. Department heads also report less involvement with the Assuring Quality of Instruction/Internal Evaluation function.

In addition to differences among managers due to position occupied, there were also differences depending on whether they had attended IT School. Specifically, training managers who attended IT School reported that they did more academic counseling and monitoring, assuring quality of instruction/internal evaluation, and inservice training. To the extent that these functions are valuable, then IT School may be valuable for training managers.

RANKING FUNCTIONS OVERALL

The ordering algorithm previously described in this report and in TAEG Report 144 was used to rank major functions, in terms of priority for inservice training, for four groups of instructors and three groups of training managers.

The application of this ordering algorithm to instructor responses resulted in the overall ranking shown in table 9. Group-paced instructors have the greatest need for inservice in the presentation and delivery of instruction and the preparation of external matters. Self-paced instructors have the greatest need for inservice in academic counseling and monitoring. There does not seem to be any consistent difference in IST needs between instructors who use CBI and those who do not. In fact, CBI as an IST topic is not given a high priority by any group of instructors. Curriculum development has a moderate priority for all instructors, while IST in individualized instruction is important for self-paced instructors who use CBI, but not for anyone else.

The application of the same ordering algorithm to training manager responses resulted in the overall rankings shown in table 10. Assuring quality of instruction/internal evaluation and managing curriculum development have the top IST priority for all three groups of training managers. The administrative review function has a moderate priority for all three groups; and the inservice training function has a low priority for all three groups. Other functions have differing priorities, depending on the type of training manager, and can be determined by examining table 10.

LIMITATIONS ON INTERPRETING RESULTS

As was the case with the results of TAEG Report 144, there are some limitations to the interpretations that should be made with these data. These results should not be used to make inferences about the absolute frequency with which a particular group performs a particular function or set of functions. However, these data are adequate for making inferences about relative frequency of performance.

There are two other considerations for using the results of this study. First, these results are based on what personnel are currently doing in their positions. No attempt was made to determine what personnel in a given position ought to be doing, nor was any attempt made to predict what personnel might be doing in the future. Thus, if substantial changes occur in the requirements of the job of an instructor or training manager, then it is possible that the IST priorities would change also. The second consideration is that the specific functions used as the basis for this study are only a representative list of functions with which these personnel could be involved. A questionnaire that addressed all possible specific functions that an instructor could perform would be prohibitive in length. Thus, the major function groups should be viewed as representative of the kinds of functions that instructors and training managers perform.

While there are limitations to the results of this study, there is also usefulness. The ordinal relationships are meaningful and can be used to guide the design of inservice training programs. For example, IST for instructors of group-paced courses should emphasize the presentation and delivery of instruction and the preparation of external matters, while IST for self-paced instructors should emphasize academic counseling and monitoring. All instructors could benefit from IST in curriculum development, while IST in individualized instruction would most benefit instructors who use CBI.

IST for training managers should give most emphasis to assuring the quality of instruction/internal evaluation and to managing curriculum development. Moderate emphasis should be given to administrative review functions. Other functions should be given different emphases depending upon which of three groups a training manager belongs to. There could, in fact, be a unique IST program for each training manager at a particular school, depending on his/her position in that school.

For five of seven major instructor functions, training managers report that instructors have more difficulty performing them than the instructors do. For two functions, instructors report more difficulty. Thus, generally, training managers perceive the job of instructor to be more difficult than instructors do. There is no evidence currently available as to which group, if either, is correct in its perceptions. However, it is interesting to note that the primary function for most instructors, the presentation and delivery of instruction, is perceived to be harder by instructors than by training managers. Also, this is the function that training managers report takes the longest for instructors to learn to perform adequately.

SECTION VI

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

There are several general conclusions to this study. First, as was the case with CISO personnel and training executives (Ford and Hall, 1983), IST is not delivered uniformly across the command or across topics, nor is it particularly widespread. Second, there are distinct types of instructors and training managers. Each type has somewhat different IST needs. Third, reiterating a conclusion from the first report of this study, the instructions that deal with IST in the NAVEDTRACOM tend to be vague as to what the content of that inservice should be.

All four types of instructors report a moderate need for IST in curriculum development. Any IST program for any type of instructor should include this topic and should give it some emphasis. Other topics for IST have differing priorities depending on the type of instructor. Group-paced instructors report a need for IST in the presentation and delivery of instruction and in the preparation of external matters. Self-paced instructors report a need for IST in academic counseling and monitoring. Self-paced instructors who use CBI report a need for IST in individualized instruction.

All training managers report a high need for inservice in assuring quality of instruction/internal evaluation and in managing curriculum development. Also, all training managers report a moderate need for IST in administrative review. The relative priorities of other topics for IST depend on the type of training manager and can be determined from table 10.

Instructors and training managers do not agree on how difficult it is for instructors to perform their major functions when they first report for duty as instructors. This difference could be due to different perceptions on the part of instructors and training managers or it could be due to measurement error in the questionnaire. If training managers are used as sources of information about instructor difficulties in performing certain functions, then this discrepancy may warrant further investigation. However, individuals may often give relatively inflated ratings of their own ability to perform. If this is the case, then finding that functions are rated more difficult by the training managers is not unusual. However, the functions rated more difficult by the instructors could indicate problems, perhaps that instructors do have severe difficulty with these functions or that the training managers do not have an accurate impression of how difficult these functions are for new instructors.

According to training managers' reports, new instructors require up to 35 weeks to learn to perform a major function adequately. Further, it takes a month or more to learn to perform all but one (computer based instruction) of the major functions. Thus, there is a potential to save considerable time in getting a new instructor to perform at an adequate level if inservice is provided in the proper topics.

RECOMMENDATIONS

The recommendations presented below are based on the assumption that the personnel involved will continue to perform functions reported as typical for their classification. There may be local exceptions. Instructors, for example, may teach only self-paced courses, only group-paced courses, or a mixture of group- and self-paced courses. To the extent that they teach both types of course, their IST should reflect the mixture.

The following recommendations are made.

1. All instructors should receive inservice in curriculum development. IST for group-paced instructors should emphasize the presentation and delivery of instruction and the preparation of external matters; IST for self-paced instructors should emphasize academic counseling and monitoring. Self-paced instructors who use CBI should also receive inservice training in individualized instruction. CBI and identifying task elements do not appear to be important topics and could be excluded from IST.

2. All training managers should receive IST in assuring quality of instruction/internal evaluation and in managing curriculum development. These two topics should be given the highest priority in IST for training managers. Also important, but less so than the above two topics, is administrative review. Inservice training in the conduct and delivery of inservice training to activity personnel does not appear to be important. The remaining three topics show moderate importance for inservice training for some training managers. These should be given priority in IST as indicated in table 10.

3. If training managers are to be used as sources of information about instructors, then some effort may be desirable to determine why the two groups do not agree about the difficulty of performing instructor functions. Although this difference could be merely a measurement artifact, it could also indicate differing perceptions of the job of the instructor. One might expect the incumbent to know best what his or her job is really like. If this is the case, then training managers may not be good sources of information about the jobs of instructors or how well they do them.

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APPENDIX A

QUESTIONNAIRES

This appendix contains a copy of the cover letter, distribution procedures, and questionnaires given to instructors and training managers.

DEPARTMENT OF THE NAVY
TRAINING ANALYSIS AND EVALUATION GROUP
ORLANDO, FLORIDA 32813

TAEG:ERH
W1371

From: Director, Training Analysis and Evaluation Group
To: Commanding Officer

Subj: In-Service Training Needs Assessment

Ref: (a) CNET ltr Code 022 of 25 Sep 81 (NOTAL)

Encl: (1) Questionnaire Package

1. The Training Analysis and Evaluation Group (TAEG) has been tasked (reference (a)) to conduct a study to identify and prioritize the in-service training needs of instructor and staff personnel assigned to NAVEDTRACOM training activities. The information developed will be used by CNET in planning for the acquisition and delivery of training needed to upgrade local manpower quality.

2. The CNET tasking requires that the TAEG obtain specific information from various training activity personnel. This information is being collected via questionnaires. Your support of the TAEG effort and encouragement of your staff for a maximum questionnaire return rate is requested.

3. Enclosure (1) contains survey forms (questionnaires) designed for obtaining required information. It is requested that these forms be distributed to individuals occupying billets/positions identified on each questionnaire cover sheet. Detailed instructions for distributing questionnaires are contained within the questionnaire package.

4. To preserve anonymity of respondents and to promote candid responses and comments, it is requested that individuals complete the forms independently and return them directly to the TAEG in the envelopes provided. Completed forms should be returned within 10 working days after receipt.

/s/

A. F. SMODE

Copy to: (w/o encl)
CNTECHTRA (N63P)

QUESTIONNAIRE DISTRIBUTION PROCEDURES

Four sets of questionnaires are contained within the attached package. Each set is intended for a different group of personnel. Please distribute the questionnaires within your activity in accordance with the information below.

1. One copy each of the Training Executive survey should go to the activity Commanding Officer, the Executive Officer, and the Director of Training (if you have a DOT).

2. The form marked Training Managers should go to half of the training department heads, school/course heads, and all other individuals who function as supervisors of assigned instructors.

3. CISO Personnel survey forms should be given to all those military and civilian personnel assigned to the CISO who perform curriculum development or evaluation work. Personnel assigned to CISO who function purely in clerical (e.g., general typing) or administrative (e.g., student control) efforts need not complete questionnaires. If any CISO personnel function in dual capacities (e.g., the DOT or a department head is also the CIS Officer), please determine what job represents the major part of that individual's effort and give him/her the corresponding questionnaire.

4. The questionnaire marked for Instructors is intended to go to about 10 percent of assigned personnel who are currently functioning as instructors. This includes personnel from other services who are teaching Navy courses. However, it does not include contract instructors. It is important that the instructors and training managers designated by your activity to complete a questionnaire be randomly selected. This means that all instructors assigned to the activity should have an equal chance of being included in the sample regardless of how long they have been there, whether they are considered good or bad and irrespective of the particular course(s) they currently teach. Likewise, every training manager should have an equal chance of being selected.

One way to select a random sample of instructors is to pick a number between 0 and 9 and give a questionnaire to each instructor whose SSN ends in that number. This should give you a random sample of about 10 percent of your instructors. A random sample of training managers could be selected by giving a questionnaire to each training manager whose SSN ends in an odd number. Any questions may be addressed to the following TAEG personnel at the autovon numbers listed:

Larry Ford	791-4367
Gene Hall	791-5673
Gene Micheli	791-5198

5. If we have sent too many questionnnaires for any group of people, please have them returned to TAEG with a notation on the cover sheet of each questionnaire that they are excess. Just the word "EXCESS" or "EXTRA" will

do. This will allow us to keep an accurate record of response rate. Conversely, if we did not send enough questionnaires for any group of people, please call and let us know how many more you need.

These procedures are important because they allow us to determine how accurate the information we get is. Since decisions about inservice training will be made based on the information you provide, it is important that it be as accurate as possible.

INSERVICE NEEDS ASSESSMENT SURVEY

FOR INSTRUCTORS

The Training Analysis and Evaluation Group (TAEG), at the request of CNET, is conducting a study to assess inservice needs for training activity personnel. This survey is part of that study.

This survey is to be filled out by instructors selected at each activity. Individual responses will not be disclosed to anyone outside the TAEG. The number in the upper right corner of this page will be used to identify training activities and to keep track of questionnaires returned. It will not be used to tie questionnaires to individual respondents. All data will be summarized in appropriate tables and charts.

Please return the completed form directly to the TAEG in the attached envelope. If you have any questions, please call:

Larry Ford - Autovon 791-4367

Gene Hall - Autovon 791-5673

Gene Micheli - Autovon 791-5198.

Technical Report 145

INSERVICE TRAINING NEEDS ASSESSMENT SURVEY

FOR

INSTRUCTORS

INSTRUCTIONS

This survey form is intended for randomly selected instructors. The form is divided into two sections. Complete the form independently of other personnel. Brief instructions for each section are given below.

Section I. This section asks for information concerning your educational and work background. Please answer each question to the best of your ability.

Section II. This section deals with functions that instructors may perform. The functions are listed down the left side and questions for each function are listed across the top of each page. Every instructor will not necessarily be involved with each function. Please read each function and answer the questions across the top for that function as accurately as you can.

INSERVICE NEEDS ASSESSMENT FOR INSTRUCTORS

SECTION I. Respondent Data

a. Rate/rank (e.g., O3, E7) - _____

b. If enlisted, give rating (e.g., EM, YN) - _____

c. Number of years/months in current position - __ __ / __ __

d. Number of previous tours of duty as an instructor _____

e. What is the highest educational level you have attained? (circle one)

(1) did not graduate from high school
(2) high school diploma or G.E.D.
(3) some college or technical training beyond high school, but not bachelor's degree
(4) graduated from college (B.A., B.S., or other bachelor's degree)
(5) some graduate school but no graduate degree
(6) Master's degree
(7) Ed.S., Ed.D., Ph.D., or other post master's or professional degree

f. Please give the CDP and CIN of the course you are currently teaching. If you are currently teaching more than one course, list the course that currently takes most of your time.

CDP - __ __ __ __
CIN - __ __ __ __ __ __ __ __ __

g. Please check the response that best describes the method of instruction you use.

(1)	(2)	(3)	(4)	(5)
All Group-Paced	Mostly Group-Paced	About Half and Half	Mostly Self-Paced	All Self-Paced

h. Do you use computer managed or computer assisted instruction in any of your courses?

(1)	(2)
No	Yes

i. Have you attended IT school?

(1)	(2)
No	Yes

j. Did you attend IT school prior to arrival for your first tour of duty as an instructor?

(1)	(2)
No	Yes

k. To what extent have instructional practices changed since you started as an instructor?

(1)	(2)	(3)	(4)	(5)
Not at All	To a Slight Extent	To a Moderate Extent	To a Great Extent	To a Very Great Extent

l. To what extent have the requirements of your job as an instructor changed since you started?

(1)	(2)	(3)	(4)	(5)
Not at All	To a Slight Extent	To a Moderate Extent	To a Great Extent	To a Very Great Extent

m. Please indicate your branch of service if it is not the U.S. Navy

(1) U.S. Army
(2) U.S. Air Force
(3) U.S. Marine Corps
(4) U.S. Coast Guard

SECTION II

INSTRUCTOR FUNCTIONS

For each function listed down the side, please answer the questions across the top by selecting the most appropriate response.	A. On the average, how often do you perform this function? (1) Daily (2) Weekly (3) Monthly (4) Every three months (5) Every 6 months (6) Yearly (7) Never							B. How difficult is it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Do not perform this function						C. When you first arrived at this activity, how difficult was it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Did not perform this function					
a. Prepare training areas	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
b. Prepare self to present instruction	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
c. Prepare instructional materials	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
d. Perform operational checks on training aids and/or training equipment	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
e. Present elements required by lesson plan/learning guide	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
f. Monitor student progress during presentation of group-paced instruction	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
g. Apply principles of learning theory	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
h. Enter students into instructional system	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)

SECTION II

INSTRUCTOR FUNCTIONS

	A. On the average, how often do you perform this function? (1) Daily (2) Weekly (3) Monthly (4) Every three months (5) Every 6 months (6) Yearly (7) Never							B. How difficult is it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Do not perform this function						C. When you first arrived at this activity, how difficult was it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Did not perform this function					
i. Monitor students in an individualized environment	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
j. Provide for individual differences in learning rates/styles/ abilities	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
k. Interact with students to achieve a positive learning environment	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
l. Evaluate student performance	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
m. Provide items for external evaluation	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
n. Distinguish between academic and non-academic problems	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
o. Identify academic counseling situation as either informal, formal or group	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)

SECTION II

INSTRUCTOR FUNCTIONS

	A. On the average, how often do you perform this function? (1) Daily (2) Weekly (3) Monthly (4) Every three months (5) Every 6 months (6) Yearly (7) Never	B. How difficult is it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Do not perform this function	C. When you first arrived at this activity, how difficult was it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Did not perform this function
p. Identify counseling technique appropriate to problem and student	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
q. Apply academic counseling technique identified	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
r. Follow up to ensure problem solution	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
s. Prepare/file counseling reports and records	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
t. Conduct job task analysis	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
u. Select task functions	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
v. Construct job performance measures	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
w. Analyze existing courses	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
x. Select instructional setting	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
y. Develop objectives	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
z. Develop tests	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)

SECTION II

INSTRUCTOR FUNCTIONS

A. On the average, how often do you perform this function?

(1) Daily
(2) Weekly
(3) Monthly
(4) Every three months
(5) Every 6 months
(6) Yearly
(7) Never

B. How difficult is it for you to perform this function?

(1) Not at all difficult
(2) Slightly difficult
(3) Somewhat difficult
(4) Very difficult
(5) Extremely difficult
(6) Do not perform this function

C. When you first arrived at this activity, how difficult was it for you to perform this function?

(1) Not at all difficult
(2) Slightly difficult
(3) Somewhat difficult
(4) Very difficult
(5) Extremely difficult
(6) Did not perform this function

		A							B						C					
aa.	Determine sequence of learning objectives	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
bb.	Specify learning events/activities	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
cc.	Review/select existing materials	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
dd.	Develop instruction	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
ee.	Develop computer managed instruction documents	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
ff.	Conduct operational validation of instructional system	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
gg.	Operate classroom clusters (Terminet and Opscan)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
hh.	Interact with computer system through classroom equipment	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
ii.	Interact with computer system through batch equipment	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)

SECTION II

INSTRUCTOR FUNCTIONS

		A. On the average, how often do you perform this function? (1) Daily (2) Weekly (3) Monthly (4) Every three months (5) Every 6 months (6) Yearly (7) Never							B. How difficult is it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Do not perform this function						C. When you first arrived at this activity, how difficult was it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Did not perform this function						
jj.	Monitor use of CMI equipment	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)				
kk.	Perform authorized maintenance on CMI system equipment	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)				
ll.	Deal with students from culturally different backgrounds	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)				

SECTION II

INSTRUCTOR FUNCTIONS

	D. How important is the performance of this function to success at your job? (1) Not at all important (2) Slightly important (3) Somewhat important (4) Very important (5) Extremely important (6) Do not perform this function	E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity? (1) No (2) Yes	F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity? (1) Not at all useful (2) Slightly useful (3) Somewhat useful (4) Very useful (5) Extremely useful
a. Prepare training areas	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
b. Prepare self to present instruction	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
c. Prepare instructional materials	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
d. Perform operational checks on training aids and/or training equipment	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
e. Present elements required by lesson plan/learning guide	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
f. Monitor student progress during presentation of group-paced instruction	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
g. Apply principles of learning theory	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
h. Enter students into instructional system	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)

SECTION II

INSTRUCTOR FUNCTIONS

	D. How important is the performance of this function to success at your job? (1) Not at all important (2) Slightly important (3) Somewhat important (4) Very important (5) Extremely important (6) Do not perform this function	E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity? (1) No (2) Yes	F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity? (1) Not at all useful (2) Slightly useful (3) Somewhat useful (4) Very useful (5) Extremely useful
i. Monitor students in an individualized environment	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
j. Provide for individual differences in learning rates/styles/ abilities	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
k. Interact with students to achieve a positive learning environment	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
l. Evaluate student performance	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
m. Provide items for external evaluation	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
n. Distinguish between academic and non-academic problems	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
o. Identify academic counseling situation as either informal, formal or group	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)

SECTION II

INSTRUCTOR FUNCTIONS

	D. How important is the performance of this function to success at your job? (1) Not at all important (2) Slightly important (3) Somewhat important (4) Very important (5) Extremely important (6) Do not perform this function	E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity? (1) No (2) Yes	F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity? (1) Not at all useful (2) Slightly useful (3) Somewhat useful (4) Very useful (5) Extremely useful
p. Identify counseling technique appropriate to problem and student	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
q. Apply academic counseling technique identified	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
r. Follow up to ensure problem solution	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
s. Prepare/file counseling reports and records	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
t. Conduct job task analysis	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
u. Select task functions	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
v. Construct job performance measures	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
w. Analyze existing courses	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
x. Select instructional setting	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
y. Develop objectives	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
z. Develop tests	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)

SECTION II

INSTRUCTOR FUNCTIONS

D. How important is the performance of this function to success at your job?

(1) Not at all important
(2) Slightly important
(3) Somewhat important
(4) Very important
(5) Extremely important
(6) Do not perform this function

E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity?

(1) No
(2) Yes

F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity?

(1) Not at all useful
(2) Slightly useful
(3) Somewhat useful
(4) Very useful
(5) Extremely useful

		D	E	F
aa.	Determine sequence of learning objectives	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
bb.	Specify learning events/activities	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
cc.	Review/select existing materials	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
dd.	Develop instruction	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
ee.	Develop computer managed instruction documents	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
ff.	Conduct operational validation of instructional system	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
gg.	Operate classroom clusters (Terminet and Opscan)	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
hh.	Interact with computer system through classroom equipment	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
ii.	Interact with computer system through batch equipment	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)

SECTION II

INSTRUCTOR FUNCTIONS

D. How important is the performance of this function to success at your job?

(1) Not at all important
(2) Slightly important
(3) Somewhat important
(4) Very important
(5) Extremely important
(6) Do not perform this function

E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity?

(1) No
(2) Yes

F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity?

(1) Not at all useful
(2) Slightly useful
(3) Somewhat useful
(4) Very useful
(5) Extremely useful

		D						E		F				
jj.	Monitor use of CMI equipment	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(1)	(2)	(3)	(4)	(5)
kk.	Perform authorized maintenance on CMI system equipment	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(1)	(2)	(3)	(4)	(5)
ll.	Deal with students from culturally different backgrounds	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(1)	(2)	(3)	(4)	(5)

INSERVICE NEEDS ASSESSMENT SURVEY

FOR

TRAINING MANAGERS

The Training Analysis and Evaluation Group, at the request of CNET, is conducting a study to assess inservice needs for training activity personnel. This survey is part of that study.

This survey is to be filled out by all training managers at each activity selected. Training manager is the term used to refer to those individuals serving as instructor supervisors, school heads or training department heads. Individual responses will not be disclosed to anyone outside the TAEG. The number in the upper right corner of this page will be used to identify training activities and to keep track of questionnaires returned. It will not be used to tie questionnaires to individual respondents. All data will be summarized in appropriate tables and charts.

Please return the completed form directly to the TAEG in the attached envelope. If you have any questions, please call:

Larry Ford - Autovon 791-4367

Gene Hall - Autovon 791-5673

Gene Micheli - Autovon 791-5198

Technical Report 145

INSERVICE TRAINING NEEDS ASSESSMENT SURVEY FOR TRAINING MANAGERS

INSTRUCTIONS

This survey form is intended for training managers (e.g., instructor supervisors, school heads, training department heads). The form is divided into 3 sections. Complete the form independently of other personnel. Brief instructions for each section are given below.

Section I. This section asks for information concerning your educational and work background. Please answer each question to the best of your ability.

Section II. This section deals with functions that training managers may perform. The functions are listed down the left side and questions for each function are listed across the top of each page. Every training manager will not necessarily be involved with each function. Please read each function and answer the questions across the top for that function as accurately as you can.

Section III. This section is concerned with functions that instructors may perform under your general supervision. Please read each function and determine if you have had an opportunity to observe instructors performing this function when they first reported for duty as instructors. If you have had that opportunity, then please answer the questions for each function, selecting the answer that best describes the typical or average instructors.

INSERVICE NEEDS ASSESSMENT FOR TRAINING MANAGERS

SECTION I. Respondent Data

a. Rate/rank (e.g., O3, E7) - _____

b. If enlisted, give rating (e.g., EM, YN) - _____

c. Number of years/months in current position - __ __ / __ __

d. Number of previous tours of duty as a training manager _____

e. Please circle the response that best describes the position you occupy.

(1) Instructor Supervisor
(2) School Head
(3) Training Department Head
(4) Other (Specify) _____

f. Number of previous tours of duty at a training activity in any capacity (except as a student) __ __

g. What is the highest educational level you have attained? (circle one)

(1) did not graduate from high school
(2) high school diploma or G.E.D.
(3) some college or technical training beyond high school, but not bachelor's degree
(4) graduated from college (B.A., B.S., or other bachelor's degree)
(5) some graduate school but no graduate degree
(6) Master's degree
(7) Ed.S., Ed.D., Ph.D., or other post master's or professional degree

h. Please check the response that best describes the method of instruction used by the intructors you supervise.

(1)	(2)	(3)	(4)	(5)
All Group-Paced	Mostly Group-Paced	About Half And Half	Mostly Self-Paced	All Self-Paced

i. Is computer-managed or computer-assisted instruction used in any of the courses for which you are responsible?

(1)	(2)
No	Yes

j. Have you attended IT school?

(1)	(2)
No	Yes

k. To what extent have the requirements of your job as a training manager changed since you started in your current position?

(1)	(2)	(3)	(4)	(5)
Not at All	To a Slight Extent	To a Moderate Extent	To a Great Extent	To a Very Great Extent

l. To what extent have new practices or techniques in the management of instruction been implemented since you started in your current position?

(1)	(2)	(3)	(4)	(5)
Not at All	To a Slight Extent	To a Moderate Extent	To a Great Extent	To a Very Great Extent

m. Do you currently instruct any courses?

(1)	(2)
No	Yes

n. Please indicate your branch of service, if it is not the U.S. Navy.

(1) U.S. Army
(2) U.S. Air Force
(3) U.S. Marine Corps
(4) U.S. Coast Guard

SECTION II

TRAINING MANAGER FUNCTIONS

For each function listed down the side, please answer the questions across the top by selecting the most appropriate response.	A. On the average, how often do you perform this function? (1) Daily (2) Weekly (3) Monthly (4) Every 3 months (5) Every 6 months (6) Yearly (7) Never	B. How difficult is it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Do not perform this function	C. When you first arrived at this activity, how difficult was it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Did not perform this function
a. Maintain the quality of the curricula and instruction	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
b. Observe classroom instruction and training exercises periodically	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
c. Provide continuous evaluation of training standards and performance	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
d. Review class critiques for possible instructional improvements	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
e. Schedule courses through NITRAS	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
f. Train instructors on teaching methods and techniques	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)

SECTION II

TRAINING MANAGER FUNCTIONS

A. On the average, how often do you perform this function?

(1) Daily
(2) Weekly
(3) Monthly
(4) Every 3 months
(5) Every 6 months
(6) Yearly
(7) Never

B. How difficult is it for you to perform this function?

(1) Not at all difficult
(2) Slightly difficult
(3) Somewhat difficult
(4) Very difficult
(5) Extremely difficult
(6) Do not perform this function

C. When you first arrived at this activity, how difficult was it for you to perform this function?

(1) Not at all difficult
(2) Slightly difficult
(3) Somewhat difficult
(4) Very difficult
(5) Extremely difficult
(5) Did not perform this function

	A	B	C
g. Evaluate progress of students and staff	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
h. Review training publications	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
i. Conduct inservice training	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
j. Ensure that training and attrition records are maintained	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
k. Evaluate student performance	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
l. Conduct internal evaluations	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
m. Provide information to external evaluation system	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
n. Use information from external evaluation system	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)

SECTION II

TRAINING MANAGER FUNCTIONS

	A. On the average, how often do you perform this function? (1) Daily (2) Weekly (3) Monthly (4) Every 3 months (5) Every 6 months (6) Yearly (7) Never							B. How difficult is it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Do not perform this function						C. When you first arrived at this activity, how difficult was it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Did not perform this function					
o. Distinguish between academic and non-academic problems	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
p. Identify academic counseling situation as either informal, formal or group	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
q. Identify counseling technique appropriate to problem and student	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
r. Apply academic counseling technique identified	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
s. Follow up to ensure problem solution	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
t. Prepare/file counseling reports and records	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
u. Develop plan to develop/revise curriculum	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)

SECTION II

TRAINING MANAGER FUNCTIONS

	A. On the average, how often do you perform this function? (1) Daily (2) Weekly (3) Monthly (4) Every 3 months (5) Every 6 months (6) Yearly (7) Never	B. How difficult is it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Do not perform this function	C. When you first arrived at this activity, how difficult was it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Did not perform this function
v. Plan training program	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
w. Administer training program	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
x. Draft and submit administrative reports	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
y. Train staff (PQS and inservice)	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
z. Implement management analysis techniques to resolve problems in schoolhouse	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
aa. Conduct management review	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
bb. Maintain staff qualifications	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
cc. Manage/coordinate the curriculum development process	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
dd. Manage/coordinate the conduct of instruction	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)

SECTION II

TRAINING MANAGER FUNCTIONS

		A. On the average, how often do you perform this function? (1) Daily (2) Weekly (3) Monthly (4) Every 3 months (5) Every 6 months (6) Yearly (7) Never							B. How difficult is it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Do not perform this function						C. When you first arrived at this activity, how difficult was it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Did not perform this function					
ee.	Use MILSTD 13793 - "Training Operations and Training Data" to evaluate formats of contractor developed training packages	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
ff.	Compute requirements for a course, including manpower, housing, equipment and facilities	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
gg.	Develop curriculum documentation	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
hh.	Validate instructional materials	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
ii.	Use Navy Training plans for course planning	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
jj.	Review and evaluate staff utilization	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
kk.	Manage Technical Training Equipment (TTE) support	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)

SECTION II

TRAINING MANAGER FUNCTIONS

	A. On the average, how often do you perform this function? (1) Daily (2) Weekly (3) Monthly (4) Every 3 months (5) Every 6 months (6) Yearly (7) Never	B. How difficult is it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Do not perform this function	C. When you first arrived at this activity, how difficult was it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Did not perform this function
11. Convene and conduct academic review boards	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)

SECTION II

TRAINING MANAGER FUNCTIONS

	D. How important is the performance of this function to success at your job? (1) Not at all important (2) Slightly important (3) Somewhat important (4) Very important (5) Extremely important (6) Do not perform this function	E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity? (1) No (2) Yes	F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity? (1) Not at all useful (2) Slightly useful (3) Somewhat useful (4) Very useful (5) Extremely useful
a. Maintain the quality of the curricula and instruction	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
b. Observe classroom instruction and training exercises periodically	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
c. Provide continuous evaluation of department training standards and performance	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
d. Review class critiques for possible curriculum improvements	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
e. Schedule courses through NITRAS	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
f. Train instructors on teaching methods and techniques	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)

SECTION II

TRAINING MANAGER FUNCTIONS

	D. How important is the performance of this function to success at your job? (1) Not at all important (2) Slightly important (3) Somewhat important (4) Very important (5) Extremely important (6) Do not perform this function	E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity? (1) No (2) Yes	F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity? (1) Not at all useful (2) Slightly useful (3) Somewhat useful (4) Very useful (5) Extremely useful
g. Evaluate progress of students and staff	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
h. Review methods of instruction and training publications, recommend changes to commanding officer	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
i. Conduct inservice training	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
j. Ensure that training and attrition records are maintained	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
k. Evaluate student performance	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
l. Conduct internal evaluations	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
m. Provide information to external evaluation system	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
n. Use information from external evaluation system	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)

SECTION II

TRAINING MANAGER FUNCTIONS

	D. How important is the performance of this function to success at your job? (1) Not at all important (2) Slightly important (3) Somewhat important (4) Very important (5) Extremely important (6) Do not perform this function	E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity? (1) No (2) Yes	F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity? (1) Not at all useful (2) Slightly useful (3) Somewhat useful (4) Very useful (5) Extremely useful
o. Distinguish between academic and non-academic problems	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
p. Identify academic counseling situation as either informal, formal or group	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
q. Identify counseling technique appropriate to problem and student	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
r. Apply academic counseling technique identified	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
s. Follow up to ensure problem solution	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
t. Prepare/file counseling reports and records	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
u. Develop project plan	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)

SECTION II

TRAINING MANAGER FUNCTIONS

D. How important is the performance of this function to success at your job?

(1) Not at all important
(2) Slightly important
(3) Somewhat important
(4) Very important
(5) Extremely important
(6) Do not perform this function

E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity?

(1) No
(2) Yes

F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity?

(1) Not at all useful
(2) Slightly useful
(3) Somewhat useful
(4) Very useful
(5) Extremely useful

	D	E	F
v. Plan training program	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
w. Administer training program	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
x. Draft and submit administrative reports	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
y. Train staff (PQS and inservice)	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
z. Implement management analysis techniques to resolve problems in schoolhouse	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
aa. Conduct management review	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
bb. Maintain staff qualifications	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
cc. Manage/coordinate the curriculum development process	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
dd. Manage/coordinate the conduct of instruction	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)

SECTION II

TRAINING MANAGER FUNCTIONS

		D. How important is the performance of this function to success at your job? (1) Not at all important (2) Slightly important (3) Somewhat important (4) Very important (5) Extremely important (6) Do not perform this function	E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity? (1) No (2) Yes	F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity? (1) Not at all useful (2) Slightly useful (3) Somewhat useful (4) Very useful (5) Extremely useful
ee.	Use MILSTD 1379B - "Training Operations and Training Data" to evaluate formats of contractor developed training packages	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
ff.	Compute requirements for a course, including manpower, housing, equipment and facilities	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
gg.	Develop curriculum documentation	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
hh.	Validate instructional materials	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
ii.	Use Navy Training plans for course planning	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
jj.	Review and evaluate staff utilization	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
kk.	Manage Technical Training Equipment (TTE) support	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)

SECTION II

TRAINING MANAGER FUNCTIONS

	D. How important is the performance of this function to success at your job? (1) Not at all important (2) Slightly important (3) Somewhat important (4) Very important (5) Extremely important (6) Do not perform this function	E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity? (1) No (2) Yes	F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity? (1) Not at all useful (2) Slightly useful (3) Somewhat useful (4) Very useful (5) Extremely useful
11. Convene and conduct academic review boards	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)

SECTION III

INSTRUCTOR FUNCTIONS

For each function that you have observed instructors perform; please answer the two questions across the top of each page.

A. How much difficulty does the typical instructor have performing this function when he or she first reports to this activity?

(1) No difficulty
(2) Slight difficulty
(3) Some difficulty
(4) Much difficulty
(5) Very much difficulty
(6) Does not perform
(7) Not observed

B. How long, does it take, in weeks, for the typical new instructor to learn to perform this function adequately?

a. Prepare training areas	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
b. Prepare self to present instruction	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
c. Prepare instructional materials	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
d. Perform operational checks on training aids and/or training equipment	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
e. Present elements required by lesson plan/learning guide	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
f. Monitor student progress during presentation of group-paced instruction	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
g. Apply principles of learning theory	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
h. Enter students into instructional system	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __

SECTION III

INSTRUCTOR FUNCTIONS

	A. How much difficulty does the typical instructor have performing this function when he or she first reports to this activity? (1) No difficulty (2) Slight difficulty (3) Some difficulty (4) Much difficulty (5) Very much difficulty (6) Does not perform (7) Not observed	B. How long, does it take, in weeks, for the typical new instructor to learn to perform this function adequately?
i. Monitor students in an individualized environment	(1) (2) (3) (4) (5) (6) (7)	__ __
j. Provide for individual differences in learning rates/styles/ abilities	(1) (2) (3) (4) (5) (6) (7)	__ __
k. Interact with students to achieve a positive learning environment	(1) (2) (3) (4) (5) (6) (7)	__ __
l. Evaluate student performance	(1) (2) (3) (4) (5) (6) (7)	__ __
m. Provide items for external evaluation	(1) (2) (3) (4) (5) (6) (7)	__ __
n. Distinguish between academic and non-academic problems	(1) (2) (3) (4) (5) (6) (7)	__ __
o. Identify academic counseling situation as either informal, formal or group	(1) (2) (3) (4) (5) (6) (7)	__ __

SECTION III

INSTRUCTOR FUNCTIONS

A. How much difficulty does the typical instructor have performing this function when he or she first reports to this activity?

(1) No difficulty
(2) Slight difficulty
(3) Some difficulty
(4) Much difficulty
(5) Very much difficulty
(6) Does not perform
(7) Not observed

B. How long, does it take, in weeks, for the typical new instructor to learn to perform this function adequately?

p.	Identify counseling technique appropriate to problem and student	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
q.	Apply academic counseling technique identified	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
r.	Follow up to ensure problem solution	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
s.	Prepare/file counseling reports and records	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
t.	Conduct job task analysis	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
u.	Select task functions	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
v.	Construct job performance measures	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
w.	Analyze existing courses	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
x.	Select instructional setting	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
y.	Develop objectives	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
z.	Develop tests	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __

SECTION III

INSTRUCTOR FUNCTIONS

A. How much difficulty does the typical instructor have performing this function when he or she first reports to this activity?

(1) No difficulty
(2) Slight difficulty
(3) Some difficulty
(4) Much difficulty
(5) Very much difficulty
(6) Does not perform
(7) Not observed

B. How long, does it take, in weeks, for the typical new instructor to learn to perform this function adequately?

aa.	Determine sequence of learning objectives	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
bb.	Specify learning events/activities	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
cc.	Review/select existing materials	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
dd.	Develop instruction	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
ee.	Develop computer managed instruction documents	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
ff.	Conduct operational validation of instructional system	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
gg.	Operate classroom clusters (Terminet and Opscan)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
hh.	Interact with computer system through classroom equipment	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __
ii.	Interact with computer system through batch equipment	(1)	(2)	(3)	(4)	(5)	(6)	(7)	__ __

SECTION III

INSTRUCTOR FUNCTIONS

A. How much difficulty does the typical instructor have performing this function when he or she first reports to this activity?

(1) No difficulty
(2) Slight difficulty
(3) Some difficulty
(4) Much difficulty
(5) Very much difficulty
(6) Does not perform
(7) Not observed

B. How long, does it take, in weeks, for the typical new instructor to learn to perform this function adequately?

jj.	Monitor use of CMI equipment	(1)	(2)	(3)	(4)	(5)	(6)	(7)	— —
kk.	Perform authorized maintenance on CMI system equipment	(1)	(2)	(3)	(4)	(5)	(6)	(7)	— —
ll.	Deal with students from culturally different back-grounds	(1)	(2)	(3)	(4)	(5)	(6)	(7)	— —

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APPENDIX B

FACTOR ANALYSES OF FREQUENCY OF PERFORMANCE OF INSTRUCTOR AND TRAINING MANAGER FUNCTIONS

This appendix presents the results of factor analyses of data concerning the frequency of performance of instructor and training manager functions.

Principle components factor analysis with varimax rotation was performed on the frequency of performance items for instructor and training manager functions. Tables B-1 and B-2 present the resulting factor pattern matrix (or loadings) respectively for instructors and training managers. All the items loading highly on a factor indicate an underlying pattern of relationships existing among those items. Each set of items loading on the same factor can, therefore, be considered as measuring the same dimension or factor. For the instructor functions and for the training manager functions, seven factors, or major function areas, exist.

For example, six items representing the Academic Counseling and Monitoring function in table B-1 load more highly on factor I than on any of the other factors, thus these items were assigned to that factor. The Evaluate Student Performance function loads similarly on factor I and factor VI. However, due to the other items in factor I, this item was assigned to it. Those items under Curriculum Development load on factor II, Computer Based Instruction items on factor III, Identifying Task Element items on factor IV, Presentation/Delivery of Instruction items on factor V, Individual Instruction items on factor VI, and Preparation of External Matters items on factor VII.

Assignment of items to the major function areas for the training manager functions can be read from table B-2.

These sets of items were combined by averaging each respondent's score over all the items in the set to get a score that represents the factor.

Using an oblique rotation, each set of items that loaded on a factor was factor analyzed separately. An oblique rotation allows for correlation between factors extracted. An orthogonal rotation would necessarily result in only one factor extracted from each set of items.

Tables B-3 through B-8 present the results of the oblique rotations for the instructor functions. Tables B-9 through B-13 present the results of the obligue rotations for the training manager functions. The Preparation of External Matters function area for instructors, and the External Evaluation and Inservice Training function areas for training managers were not factor analyzed as these major function areas consist of less than four function items. There are two subfactors for each of the major function areas analyzed. This indicates that each of these function areas has two subordinate components.

Table B-3 shows the results of the oblique rotation of the instructor Academic Counseling and Monitoring function. Seven items of this set load more highly on factor I and one item loads more highly on factor II. Similar observations of tables B-4 through B-13 demonstrate the subordinate components of the remaining major function areas for instructors and training managers.

For purposes of analysis, the major function areas were used. However, for purposes of designing curricula for inservice training, it could be useful to consider these various subfactors as parts of a course of training designed to address the major function area.

TABLE B-1. VARIMAX ROTATED FACTOR LOADINGS OF FREQUENCY OF PERFORMANCE ITEMS FOR INSTRUCTORS

ITEMS	FACTORS						
Academic Counseling and Monitoring	I	II	III	IV	V	VI	VII
Evaluate student performance	.41	.09	.05	.03	.32	.47	.08
Distinguish between academic and nonacademic problems	.69	.07	.02	.10	.17	.35	.02
Identify academic counseling situation as either informal, formal or group	.79	.09	.04	.13	.10	.18	-.00
Identify counseling technique appropriate to problem and student	.91	.09	.07	.13	.04	.13	.04
Apply academic counseling technique identified	.92	.09	.06	.09	.04	.11	.04
Followup to ensure problem solution	.88	.08	.02	.12	.04	.15	.03
Prepare/file counseling reports and records	.71	.05	.11	.10	.03	.05	.02
Deal with students from culturally different backgrounds	.35	.07	.12	.03	.11	.10	-.02
Curriculum Development							
Select instructional setting	.11	.48	-.05	.37	.06	.15	.18
Develop objectives	-.01	.70	.16	.32	.03	.04	-.01
Develop tests	-.01	.63	-.04	.07	.11	-.10	-.03
Determine sequence of learning objectives	.05	.71	.13	.23	.09	.02	.07
Specify learning events/activities	.16	.66	-.00	.22	.07	.13	.14
Review/select existing materials	.13	.73	-.10	-.01	.07	.11	.16
Develop instruction	.08	.75	-.05	.04	.03	-.09	.03
Analyze existing courses	.11	.56	-.01	.14	-.14	.15	.09
Conduct operational validation of instructional system	.09	.31	.20	.19	.07	.05	-.05
Computer Based Instruction							
Develop computer managed instruction documents	.04	.10	.58	.14	.12	-.07	-.08
Operate classroom clusters (Terminet and Opscan)	.17	-.05	.69	-.00	-.29	.23	-.10
Interact with computer system through classroom equipment	.09	-.06	.74	-.01	-.17	.11	.05
Interact with computer system through batch equipment	-.02	.05	.66	.06	-.09	-.06	.15
Monitor use of CMI equipment	.16	-.06	.79	-.02	-.17	.11	-.09
Perform authorized maintenance on CMI system equipment	.01	.08	.65	.08	.12	-.20	-.04
Identifying Task Elements							
Conduct job task analysis	.17	.17	.10	.83	.09	.02	.02
Select task functions	.15	.31	.04	.83	.06	.03	.03
Construct job performance measures	.15	.41	.05	.67	.01	.09	.07
Provide items for external evaluation	.28	.13	-.02	.42	-.06	.30	.22

TABLE B-1. VARIMAX ROTATED FACTOR LOADINGS OF FREQUENCY OF PERFORMANCE ITEMS FOR INSTRUCTORS (continued)

ITEMS	FACTORS						
Presentation/Delivery of Instruction	I	II	III	IV	V	VI	VII
Prepare self to present instruction	.07	.06	-.00	-.02	.57	.14	.46
Apply principles of learning theory	.25	.05	.02	.06	.62	.35	.11
Present elements required by lesson plan/learning	.10	.08	-.22	.07	.72	.02	.18
Monitor student progress during presentation of group-paced instruction	.06	.14	-.33	.01	.67	.06	.10
Individualized Instruction							
Monitor students in an individualized environment	.22	.02	.06	.19	-.07	.63	.07
Provide for individual differences in learning rates/ styles/abilities	.26	.04	-.02	.03	.24	.66	.06
Interact with students to achieve a positive learning environment	.25	.04	.01	-.03	.43	.63	-.05
Enter students into instructional system	.25	.05	.36	-.08	.34	.22	.05
Preparation of External Matters							
Prepare training areas	.06	.15	.02	.09	.04	.08	.79
Prepare instructional materials	.02	.32	-.17	-.00	.18	-.03	.68
Perform operational checks on training aids and/or training equipment	-.02	-.06	.06	.16	.29	.07	.59

TABLE B-2. VARIMAX ROTATED FACTOR LOADINGS OF FREQUENCY OF PERFORMANCE ITEMS FOR TRAINING MANAGERS

ITEMS	FACTORS						
Academic Counseling and Monitoring	I	II	III	IV	V	VI	VII
Evaluate student performance	.41	.46	.09	-.23	.10	.09	.19
Distinguish between academic and nonacademic problems	.65	.03	.03	.22	-.02	.02	-.00
Identify academic counseling situation as either informal, formal or group	.80	.14	.05	.14	.06	.09	.13
Identify counseling technique appropriate to problem and student	.90	.15	.02	.03	.05	.08	.06
Apply academic counseling technique identified	.87	.17	.04	.00	.10	.10	.09
Follow up to ensure problem solution	.85	.11	.05	.08	.06	.05	.02
Prepare/file counseling reports and records	.69	.15	.08	.13	.10	.12	.09
Convene and conduct academic review boards	.45	.06	.20	.21	-.10	.19	.05
Assuring Quality of Instruction/Internal Evaluation							
Maintain the quality of the curricula and instruction	.04	.57	.22	-.06	.35	-.03	-.02
Observe classroom instruction and training exercises periodically	.17	.68	.01	.00	.12	.12	.05
Provide continuous evaluations of training standards and performance	.09	.67	.10	.15	.07	.08	.08
Train instructors on teaching methods and techniques	.23	.44	.09	.05	.17	.18	.23
Evaluate progress of students and staff	.25	.62	.05	.25	-.04	-.00	.19
Conduct internal evaluations	.13	.44	.13	.10	.05	.37	.37
Manage/coordinate the conduct of instruction	.19	.53	.14	.30	.36	-.00	-.07
Review class critiques for possible instructional improvements	.03	.41	.04	.40	-.10	.01	-.09
Plan for Acquisition/Conduct of Instruction							
Compute requirements for a course, including manpower, housing, equipment, and facilities	.02	-.00	.62	.17	.07	.33	.03
Develop curriculum documentation	.01	.08	.62	-.07	.43	.12	.06
Validate instructional materials	.06	.24	.60	-.07	.40	.00	.11
Use Navy training plans for course planning	.12	-.03	.66	.11	.23	-.01	.05
Manage Technical Training Equipment (TTE) support	.13	.15	.55	.23	-.06	.00	.24
Use MIL-STD 13798, "Training Operations and Training Data" to evaluate formats of contractor developed training packages	.02	-.00	.66	.07	-.08	.23	.09

TABLE B-2. VARIMAX ROTATED FACTOR LOADINGS OF FREQUENCY OF PERFORMANCE ITEMS FOR TRAINING MANAGERS (continued)

ITEMS	FACTORS						
Administrative Review	I	II	III	IV	V	VI	VII
Implement management analysis techniques to resolve problems in schoolhouse	.17	-.01	.12	.63	.20	.35	.06
Conduct management review	.05	.02	.24	.61	.17	.35	.03
Maintain staff qualifications	.19	.25	.08	.41	.35	.06	.33
Review and evaluate staff utilization	.06	.30	.35	.51	.05	.06	.13
Ensure that training and attrition records are maintained	.31	.24	-.00	.34	.04	.06	.22
Draft and submit administrative reports	.18	.07	.02	.66	.12	-.05	.08
Managing Curriculum Development							
Manage/coordinate the curriculum development process	.05	.15	.44	.25	.43	-.03	-.03
Develop plan to develop/revise curriculum	.11	.14	.36	.04	.52	.10	-.00
Plan training program	.08	.15	.10	.12	.69	.21	.16
Administer training program	.10	.13	.07	.28	.62	-.00	.17
External Evaluation							
Provide information to external evaluation system	.15	.15	.12	.05	.06	.74	.11
Use information from external evaluation system	.19	.08	.17	.17	.07	.73	.01
Inservice Training							
Conduct inservice training	.11	.16	.14	.00	.07	.11	.76
Train staff (PQS and inservice)	.12	.09	.18	.31	.28	.05	.66

TABLE B-3. OBLIQUE ROTATION OF FACTOR PATTERN MATRIX FOR FREQUENCY OF PERFORMANCE OF INSTRUCTOR ACADEMIC COUNSELING AND MONITORING FUNCTIONS

ITEMS	FACTORS	
Academic Counseling and Monitoring	I	II
1. Evaluate student performance	.45	.32
Distinguish between academic and nonacademic problems	.74	.12
Identify academic counseling situation as either informal, formal or group	.84	-.02
Identify counseling technique appropriate to problem and student	.94	-.02
Apply academic counseling technique identified	.94	-.03
Followup to ensure problem solution	.91	-.01
Prepare/file counseling reports and records	.75	-.10
2. Deal with students from culturally different backgrounds	-.03	.96

NOTE: Correlation between factors I and II is .35.

TABLE B-4. OBLIQUE ROTATION OF FACTOR PATTERN MATRIX FOR FREQUENCY OF PERFORMANCE OF INSTRUCTOR CURRICULUM DEVELOPMENT FUNCTIONS

ITEMS	FACTORS	
Curriculum Development	I	II
1. Select instructional setting	.57	.16
Develop objectives	.75	.02
Develop tests	.40	.38
Determine sequence of learning objectives	.92	-.27
Specify learning events/activities	.79	-.06
Review/select existing materials	.63	.18
Develop instruction	.61	.18
2. Analyze existing courses	.27	.62
Conduct operational validation of instructional system	-.08	.86

NOTE: Correlation between factors I and II is .41.

TABLE B-5. OBLIQUE ROTATION OF FACTOR PATTERN MATRIX FOR FREQUENCY OF PERFORMANCE OF INSTRUCTOR COMPUTER BASED INSTRUCTION FUNCTIONS

ITEMS	FACTORS	
Computer Based Instruction	I	II
1. Develop computer managed instruction documents	.64	.01
Operate classroom clusters (Terminet and Opscan)	.56	.34
Interact with computer system through classroom equipment	.82	.04
Interact with computer system through batch equipment	.85	-.12
2. Monitor use of CMI equipment	.33	.67
Perform authorized maintenance on CMI system equipment	-.11	.92

NOTE: Correlation between factors I and II is .42.

TABLE B-6. OBLIQUE ROTATION OF FACTOR PATTERN MATRIX FOR FREQUENCY OF PERFORMANCE OF INSTRUCTOR IDENTIFYING TASK ELEMENTS FUNCTIONS

ITEMS	FACTORS	
Identifying Task Elements	I	II
1. Conduct job task analysis	.91	-.05
Select task functions	.94	-.02
Construct job performance measures	.80	.08
2. Provide items for external evaluation	.00	1.00

NOTE: Correlation between factors I and II is .39.

TABLE B-7. OBLIQUE ROTATION OF FACTOR PATTERN MATRIX FOR FREQUENCY OF PERFORMANCE OF INSTRUCTOR PRESENTATION/DELIVERY OF INSTRUCTION FUNCTIONS

ITEMS	FACTORS	
Presentation/Delivery of Instruction	I	II
1. Prepare self to present instruction	.96	.12
Apply principles of learning theory	.64	-.22
2. Present element required by lesson plan/learning	.36	-.59
Monitor student progress during presentation of group-paced instruction	-.08	-.97

NOTE: Correlation between factors I and II is .45.

TABLE B-8. OBLIQUE ROTATION OF FACTOR PATTERN MATRIX FOR FREQUENCY OF PERFORMANCE OF INSTRUCTOR INDIVIDUALIZED INSTRUCTION FUNCTIONS

ITEMS	FACTORS	
Individualized Instruction	I	II
1. Monitor students in an individualized environment	.58	.29
Provide for individual differences in learning rates/styles/abilities	.88	-.06
Interact with students to achieve a positive learning environment	.82	-.08
2. Enter students into instructional system	-.02	.97

NOTE: Correlation between factors I and II is .26.

TABLE B-9. OBLIQUE ROTATION OF FACTOR PATTERN MATRIX FOR FREQUENCY OF PERFORMANCE OF TRAINING MANAGER ACADEMIC COUNSELING AND MONITORING FUNCTIONS

	ITEMS	FACTORS	
	Academic Counseling and Monitoring	I	II
1.	Evaluate student performance	.39	.21
	Distinguish between academic and nonacademic problems	.76	-.15
	Identify academic counseling situation as either informal, formal or group	.88	-.06
	Identify counseling technique appropriate to problem and student	.90	.05
	Apply academic counseling technique identified	.86	.10
	Followup to ensure problem solution	.86	.03
2.	Prepare/file counseling reports and records	.45	.49
	Convene and conduct academic review boards	-.05	.94

NOTE: Correlation between factors I and II is .43.

TABLE B-10. OBLIQUE ROTATION OF FACTOR PATTERN MATRIX FOR FREQUENCY OF PERFORMANCE OF TRAINING MANAGER ASSURING QUALITY OF INSTRUCTION/INTERNAL EVALUATION FUNCTIONS

	ITEMS	FACTORS	
	Assuring Quality of Instruction/Internal Evaluation	I	II
1.	Maintain the quality of the curricula and instruction	.57	.16
	Observe classroom instruction and training exercises periodically	.69	.08
	Provide continuous evaluation of training standards and performance	.58	.33
	Train instructors on teaching methods and techniques	.78	-.23
	Evaluate progress of students and staff	.52	.29
	Conduct internal evaluations	.71	-.22
	Manage/coordinate the conduct of instruction	.62	.13
2.	Reveiw class critiques for possible instructional improvements	.06	.87

NOTE: Correlation between factor I and II is .28.

TABLE B-11. OBLIQUE ROTATION OF FACTOR PATTERN MATRIX FOR FREQUENCY OF PERFORMANCE OF TRAINING MANAGER PLANS FOR ACQUISITION CONDUCT OF INSTRUCTION FUNCTIONS

ITEMS	FACTORS	
Plans for Acquisition/Conduct of Instruction	I	II
1. Computer requirements for a course, including manpower, housing, equipment, and facilities	.50	.36
Develop curriculum documentation	.78	-.02
Validate instructional materials	.82	-.27
Use Navy training plans for course planning	.63	.15
Manage Technical Training Equipment (TTE) support	.48	.07
2. Use MIL-STD 1379B, "Training Operations and Training Data," to evaluate formats of contractor developed training packages	.01	.93

NOTE: Correlation between factors I and II is .27.

TABLE B-12. OBLIQUE ROTATION OF FACTOR PATTERN MATRIX FOR FREQUENCY OF PERFORMANCE OF TRAINING MANAGER ADMINISTRATIVE REVIEW FUNCTIONS

ITEMS	FACTORS	
Administrative Review	I	II
1. Implement management analysis techniques to resolve problems in schoolhouse	.86	-.03
Conduct management review	.87	-.06
Maintain staff qualification	.51	.25
2. Review and evaluate staff utilization	.30	.48
Ensure that training and attrition records are maintained	-.16	.89
Draft and submit administrative reports	.14	.63

NOTE: Correlation between factors I and II is .43.

TABLE B-13. OBLIQUE ROTATION OF FACTOR PATTERN MATRIX FOR FREQUENCY OF PERFORMANCE OF TRAINING MANAGER MANAGING CURRICULUM DEVELOPMENT FUNCTIONS

ITEMS	FACTORS	
Managing Curriculum Development	I	II
1. Manage/coordinate the curriculum development process	.82	.00
Develop plan to develop/revise curriculum	.86	.01
2. Plan training program	.27	.68
Administer training program	-.12	.96

NOTE: Correlation between factors I and II is .39.

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